

# The role of trust in achieving sustainable community-based disaster risk management - case studies from the Philippines

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**The role of trust in achieving sustainable community-based disaster risk management – case studies from the Philippines**

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# The role of trust in achieving sustainable community-based disaster risk management – case studies from the Philippines

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## Abstract

Impacts of disasters are felt acutely at community level, as a consequence communities in the Philippines are among the most affected by the increase in disaster risks. This realization led to an increase of community-based approaches, such as community-based disaster risk management (CBDRM). However, literature acknowledges a recurring failure of projects to be sustainable long-term, attributed to a lack of trust in implementers, lowering the motivation of communities to commit. Therefore, this research explores the role of trust in achieving sustainable CBDRM for the case of four communities in Pangasinan, Philippines. Based on the literature, a conceptual framework was created and adapted according to findings through two focus group discussions and 15 key informant interviews with community members, CBDRM implementers, and duty-bearers. The role of trust was identified by analyzing the data following Creswell (2013) and relating it to other relevant factors for the CBDRM sustainability in terms of horizontal trust and vertical trust. Interviewees identified the importance of awareness, linked to knowledge on vulnerabilities and disasters, which they also related to perceived source trustworthiness. Furthermore, an interactive relationship with trust and meaningful, inclusive, and accessible participation was highlighted and considered to significantly contribute to CBDRM sustainability. Political complexities that impact trust levels show the need for an enabling environment and a stricter policy implementation to enhance sustainability. While the role of trust in achieving sustainable CBDRM in this research is considered substantial, more research on different aspects of trust and especially within other contexts is needed.

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## Summary

Disaster risks are considered to be increasing, and many lower- and lower-middle-income countries, such as the Philippines, experience associated losses particularly harshly (Pandey et al., 2012). However, while disasters strike nation-wide, communities feel the impacts most acutely (Peng et al., 2020). This realization has driven a shift from historically top-down to more participatory and bottom-up approaches, such as community-based disaster risk management (CBDRM) (Brower et al., 2014; Pandey et al., 2012). However, literature highlights a recurring failure of projects to be sustainable in the long-term, attributed to a lack of trust in implementers lowering the motivation and long-term engagement of community members, raising the question of trust in any successful CBDRM implementation (Pandey et al., 2012; Peng et al., 2020; Van Niekerk et al., 2017). Therefore this research explores the role of trust, in achieving sustainable CBDRM in the context of other relevant factors and furthermore explores challenges for building trust. The research offers a specific perspective for the Philippines by focusing on the four rural communities Pangapisan North, Malued, Mabalbalino, and Angatel in the Pangasinan region. This is with the aim of contributing to closing the identified gap on the trust-CBDRM field in research.

The research was informed by a literature review, which led to the creation of a conceptual framework based on ideas from Peng et al. (2020) and Fornalé et al (2023). Two focus group discussions and 15 semi-structured key informant interviews were conducted in the four communities with community members, CBDRM implementers and duty-bearers. The aim of these interviews was to gain insights into their perspectives on the current trust landscape and perceived challenges. The data from the interviews was analyzed according to the Data Analysis Spiral from Creswell (2013) and the findings were used to adapt the previously created conceptual framework. This research is not exhaustive, thus does not claim to represent all perspectives of the communities. Possible limitations in this research relate to language barriers, cultural differences and biases from the researcher, as well as limited generalizability due to the chosen methodology of this research, which however was minimized by closely collaborating with the established local non-governmental organization Center for Disaster Preparedness Foundation.

The interviewees highlighted various factors that influence the sustainability and success of CBDRM approaches. These include the interactive relationship between information, knowledge, and awareness and between these, participation and trust. They also emphasized different levels of pre-existing awareness and knowledge regarding vulnerabilities

and disasters, and a positive relationship between higher levels of awareness and participation. Participation was highlighted as key to the success of CBDRM approaches and various factors impacting whether community members participate were mentioned next to awareness. The inclusivity, accessibility, and contextual adaptation of activities were considered to impact the participation. Furthermore, trust was highlighted as a main driver for participation, and the impact negative experiences could have on trusting new implementers and thus participating in their activities was identified. The significance of an enabling environment, encompassing robust policies and frameworks, as well as a supportive political climate was emphasized, with a consensus that the Filipino context shows no lack of existing laws on disaster risk management, but exhibits shortcomings in implementing these. In this context, several interviewees mentioned the impact that levels of trust in local, but also national politics have on CBDRM activities, for instance the support of the local government unit or trust in the local leader.

Overall, trust was identified as a critical factor for CBDRM sustainability. This was analyzed in terms of horizontal trust within the community and vertical trust both ways from communities to implementers and vice versa. A strong sense of inter-community trust was highlighted and stated as a prerequisite for enabling collaboration. Simultaneously, challenges related to power dynamics and tensions were identified. Furthermore, vertical trust was emphasized as crucial. Personal characteristics, implementer effort, and understanding of the local community were highlighted as the most critical factors in gaining trust from the community, with no mention of technical skills. Difficulties in building trust across social groups related to power dynamics and systemic inequalities were pointed out. Furthermore, the political context was referenced. Examples were given of projects without trust-building efforts, which were seen as less sustainable in the long term. Overall, there was a consensus on the importance of building a trust relationship between implementers and communities and the time and effort it requires. The majority of the findings aligned with existing literature, however, gaps especially concerning the implementer toward community trust and the Filipino context could be identified.

The role of trust in achieving sustainable CBDRM was considered substantial, with higher levels of trust correlating with increased long-term participation and commitment, which could lead to better outcomes and enhanced sustainability. However, further research to gain a more holistic understanding of the role of trust in achieving sustainable CBDRM and how it interacts with the other identified factors is needed.

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## List of Abbreviations

CBDM	Community-based disaster management
CBDRM	Community-based disaster risk management
CBDRR	Community-based disaster risk reduction
CDP	Center for Disaster Preparedness Foundation
CR	Community resilience
CSO	Civil Society Organization
DRM	Disaster risk management
FGD	Focus group discussion
KII	Key-informant interview
LGU	Local government unit
NGO	Non-governmental organization
PWD	Person with disabilities

## List of explanations for the Filipino context

Bayanihan	Filipino culture of cooperation, and helping without expecting anything in return
Barangay	Smallest political sub-division of Filipino municipalities
Purok	Indigenous sub-structure of Filipino Barangays, with a Purok leader and organized community activities

## 1. Introduction

Disasters can impose wide-ranging environmental, social, political, and psychological impacts (Peng et al., 2020). Over the last decades, the toll of affected people and economic losses has risen, signifying an increase in disaster risks (Pandey et al., 2012; Hagelsteen & Becker, 2013). Since the impacts of disasters are deeply intertwined with socioeconomic conditions, many lower and lower-middle-income countries, such as the Philippines, experience the losses particularly harshly (Pandey et al., 2012). The country's location in the Pacific Ring of Fire and its socio-economic conditions make it one of the most disaster-prone nations globally, ranking highest in the 2023 World Risk Index (Bündnis Entwicklung Hilft/IFHV, 2023; Tan, 2022). Such realities underscore the need for tailored disaster risk management (DRM) approaches.

Historically, DRM was focused on top-down approaches, with higher authorities deciding on the perceived needs of local populations, leaving communities in a recipient role (Brower et al., 2014; Pandey et al., 2012). However, these approaches failed to meet vital humanitarian needs - driving a shift towards more bottom-up and participatory approaches, such as community-based disaster risk management (CBDRM) (Pandey et al., 2012). CBDRM aims to increase community resilience (CR) by enhancing the skills and capacities of residents (Peng et al., 2020). This shift to focus on community approaches is crucial, since even if a disaster strikes nationwide, the impacts are felt acutely at the community level, making communities the "disaster fronts" (Peng et al., 2020, p.1). Furthermore, communities usually know their context, capabilities, and needs best and therefore should be integrated into the knowledge-creation process (Peng et al., 2020; Van Niekerk et al., 2017). As the local knowledge and culture must be respected, literature argues that CBDRM cannot successfully be implemented by outsiders (Matthies, 2017; Van Niekerk et al., 2017). However, limited resources and capacities in communities often hamper successful locally-led CBDRM, leading to a need for such outside intervention (Van Nierkerk et al., 2017). This creates dependencies even in these approaches and leaves communities on the receiving end of aid (Matthies, 2017).

Although there has been increasing research on improving such community-based approaches, various researchers highlight the recurrent failure of projects to be sustainable in the long term (Pandey et al., 2012; Peng et al., 2020; Van Niekerk et al., 2017). Peng et al. (2020) relate this failure to a lack of trust in (outside) implementers, lowering the motivation

of community members to engage and impeding long-term commitment. Other scholars reflect this and state that participation is a critical determinant of sustainability (Ma et al., 2022; Pandey et al., 2012; Zubir & Amirrol, 2011), which raises the question of the role of trust in any successful CBDRM implementation.

The purpose of this research is to explore the role of trust in achieving sustainable CBDRM in four communities in the Pangasinan region, Philippines. A wide range of literature on CBDRM was identified, with many articles pointing out the importance of trust, yet existing research focusing specifically on the aspect of trust in CBDRM could only be identified for China (Allen, 2006; Han et al., 2020; Ma et al., 2022; Matthies, 2017; Peng et al., 2020; Siegrist et al., 2005; Xue et al., 2021). Therefore, this research aims to contribute to filling existing gaps in the field of CBDRM and trust and offers a specific perspective for the Philippines. This research is supported by the *Center for Disaster Preparedness Foundation (CDP)*, a local non-government organization (NGO) that has been implementing CBDRM in the Philippines for more than two decades, has demonstrated a strong interest in the research results and is a trusted partner of the communities. Furthermore, the *Swedish International Centre for Local Democracy* supported this research with a field grant for traveling to the communities.

This research addresses one main research question and several supporting questions for the context of the Pangasinan region in the Philippines:

- 1. What role does trust play in achieving successful, sustainable community-based disaster risk management? And between whom is trust relevant?**
  - a. What factors next to trust are considered relevant to achieving sustainable CBDRM?
  - b. What factors influence the participation of community members in CBDRM and what role does trust play in this?
  - c. What are the challenges to creating and sustaining trust?

Based on these research questions, this thesis explores the relationship between the communities and CBDRM implementers by conducting focus group discussions and key informant interviews to understand the communities' and the implementers' definitions of trust and their understanding of how this affects CBDRM. To understand the complex role of trust, a conceptual framework based on the ideas of social trust by Peng et al. (2020) and Fornalé et al. (2023) is used and adapted according to the research findings (explained in Chapter 3.3).

## 2. Methodology and methods

This research adopts a mixture of an abductive and a constructionist version of the retroductive logic of inquiry according to Blaikie (2010). This combination is suitable because the abductive research strategy explores meanings and interpretations, thus why people do things a certain way, while the constructionist retroductive approach aims to uncover underlying mechanisms (Blaikie, 2010). A case study approach is used in this study (Blaikie, 2010), focusing on four communities in the Pangasinan region. Case studies permit an in-depth investigation of contextual realities, making them suitable for studying complex and contextual phenomena (Mohd Noor, 2008) such as trust.

### 2.1 Data Collection Methods

This research collected data through secondary sources via a literature search and primary data through focus group discussions (FGDs) and semi-structured key informant interviews (KIIs). Figure 1 shows the steps of the methodology, explained in the next chapter.

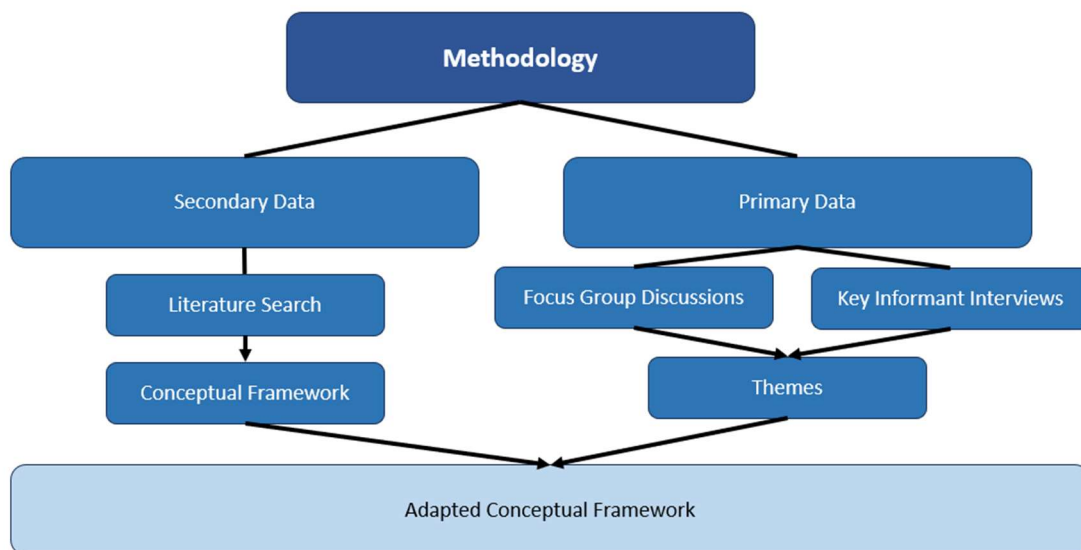


Figure 1: Steps of the methodology (own figure)

#### 2.1.1 Secondary Data

This research was informed by a literature search using the keywords and Boolean search operators presented in Table 1 in the search engines *Google Scholar* and *Scopus* to reduce irrelevant entries in the search results (Droste et al., 2010). To get a more comprehensive overview, similar concepts regarding trust and CBDRM were used synonymously. Additionally, the *snowball principle* was applied by examining bibliographies of

pertinent publications to identify the original sources, thus providing a more comprehensive overview, if only of older, and possibly one-sided sources (Kindler et al., 2019). The obtained literature was prioritized based on the abstracts, those considered *relevant* in that they mentioned several keywords were read first. Especially in the Google Scholar search strings, many abstracts did not mention any keywords, thus could be excluded. Additionally, some relevant reports and websites were identified to supplement the overall research but were not considered part of this step.

Table 1: Combination of keywords and hits in the search engines for literature search (own graph)

Combination of Keywords	Used Tool	Hits	
		Scopus	Google Scholar
TITLE-ABS-KEY / Allintitle "community-based disaster risk management" AND "Social trust" AND "philippines"	Scopus / Google Scholar	5	26
TITLE-ABS-KEY / Allintitle ("community-based disaster risk management" AND ("Social trust" OR "trust"))	Scopus / Google Scholar	3	59
TITLE-ABS-KEY / Allintitle "community-based disaster risk management" AND "institutional trust" AND "interpersonal trust"	Scopus / Google Scholar	0	3
TITLE-ABS-KEY / Allintitle "community-based disaster risk management" AND "institutional trust"	Scopus / Google Scholar	0	8
TITLE-ABS-KEY / Allintitle "community-based disaster risk management" AND "interpersonal trust"	Scopus / Google Scholar	0	12
TITLE-ABS-KEY / Allintitle "community-based disaster risk management" AND "trust"	Scopus / Google Scholar	3	1.210
TITLE-ABS-KEY / Allintitle ( ("community based disaster risk management" OR "community based disaster management" OR "community based preparedness" OR "community resilience" ) AND "social trust" )	Scopus / Google Scholar	21	2.400
TITLE-ABS-KEY / Allintitle ("the role of trust" AND "community-based disaster risk management")	Scopus / Google Scholar	23	39

Based on the literature found, a conceptual framework on the role of trust in CBDRM was created, see chapter 3.3. This framework was adapted according to the research findings of the primary data collection.

### **2.1.2 Primary Data**

The primary data collection for this research can be categorized into two parts: FGDs and KIIs. Two FGDs, with a total of 19 interviewees and 15 KIIs were conducted over five weeks. The terms *interviewees* and *respondents* will be used interchangeably referring to the participants in both the FGDs and KIIs.

#### ***Focus Group Discussions***

The FGDs were conducted as interactive discussions with pre-selected interviewees and guided by the researcher as the moderator (Hennink, 2014; Macnaghten & Myers, 2007). This method was chosen for its ability to capture diverse views and generate collective narratives unobtainable from one-on-one interviews (Basnet, 2018; Hennink, 2014; Ritchie et al., 2013). To minimize the risk of domination when including different social, and hierarchical levels (Acocella, 2011), the interviewees consisted exclusively of community members. Originally the plan was to conduct two FGDs per community - one with community members engaged in CBDRM and another with implementers. However, the opportunity arose to visit two more communities, leading to only two FGDs, but instead more KIIs in four communities. The FGDs were conducted in person on 14. February and 23. February 2024, with real-time translation provided by CDP and lasted between 30 and 55 minutes.

#### ***Key Informant Interviews***

Additionally, 15 semi-structured KIIs were conducted in English, with two interviews involving two respondents. The interviews were conducted between 16. February and 05. March 2024. Fourteen were conducted in person and one online. The key informants were chosen with support of CDP based on their roles and insider knowledge of the communities (Lokot, 2021), resulting in KIIs with duty-bearers, implementers, and community leaders. The interviewees could do the interview either in English or Tagalog with a translator present. Although all interviewees agreed to the interviews being conducted in English, they could respond in their local dialect if necessary, as the transcriptions were subsequently translated. The semi-structured format of the interviews allowed to deepen, clarify, and add new perspectives to the insights from the discussions, while their flexible nature facilitated follow-up or in-depth questions (Rapley, 2007). The FGD and KII guide (compare Annex 1 & 2)

consisted of seven main questions with several sub-questions related to four main dimensions of analysis:

1. Factors for successful and sustainable CBDRM
2. Factors for Participation in CBDRM approaches
3. Definition and importance of trust
  - a. Horizontal / Interpersonal trust
  - b. Vertical / Institutional trust
4. Challenges related to trust

#### ***Data Sources & Participant Characteristics***

CDP supported the participant identification for both FGDs and KIIs in the communities where they had previously implemented CBDRM activities, thus acting as gatekeepers for researcher access. This study was therefore based on purposeful, non-probabilistic sampling where selected interviewees can “purposefully inform an understanding of the research problem and central phenomenon in the study” (Creswell, 2013, p.156). Priority was given to individuals with experience in participating or implementing CBDRM approaches.

Before conducting the FGDs and KIIs, the sociodemographic factors of typical participants in CBDRM activities were discussed with CDP to ensure a representative sample in the FGDs, and thus a less biased impact of the research (Olsen & Orr, 2016). It was noted that CBDRM participants are typically women aged 30-50 or elderly residents, with less male participation, due to primarily female leadership in communities, caregiving roles in emergencies, and increased day-time flexibility compared to men working in agriculture (Interviews). Efforts were made to include a variety of interviewees in both the FGDs and KIIs, encompassing different genders, youth, and persons with disabilities (PWD), to follow the CBDRM principle of inclusiveness and ensure that varied perspectives on trust are mirrored in the research results (Van Niekerk et al., 2017).

In the KIIs, a total of 17 interviewees comprising eight females and nine males, were interviewed (see figure 2), serving roles as duty-bearers in the local government unit (LGU) (8), implementers (7), or community leaders (2). Three interviewees each were from the communities Pangapisan North, Malued, and Angatel, one from Mabalbalino, one external, and six from CDP. The ages ranged from 21 to 65 (see figure 3). The FGDs had 13 interviewees in Pangapisan North and six in Malued, with 15 being female and four male (see figure 4 & 5), with ages ranging from 25 to 72. Thus, in total 19 community members serving various roles



within sub-organizations in the community in FGDs, two community leaders, eight local duty-bearers and seven CBDRM implementers as KII informants could be interviewed on the topic (see figure 6 & Annex 6).

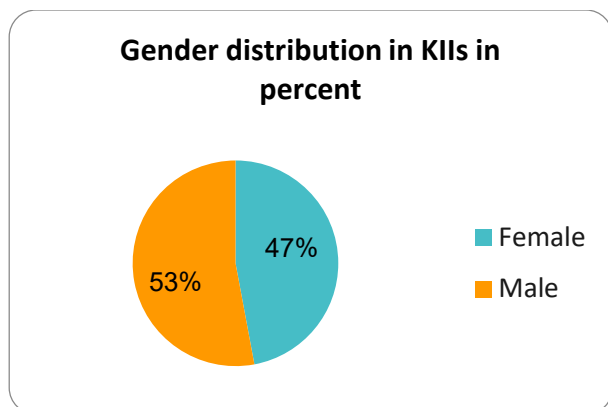


Figure 2: Gender distribution in KIIs in percent (own graph)

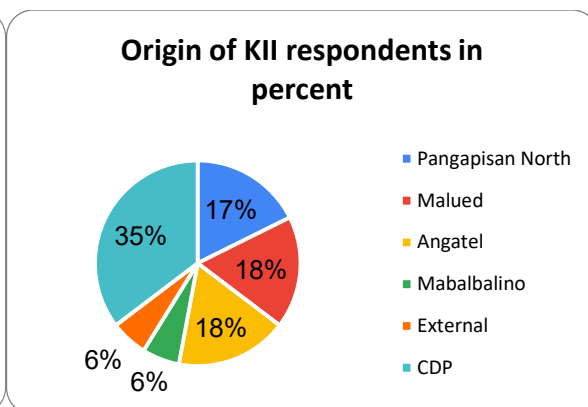


Figure 3: Community and Origin of KIIs (own graph)

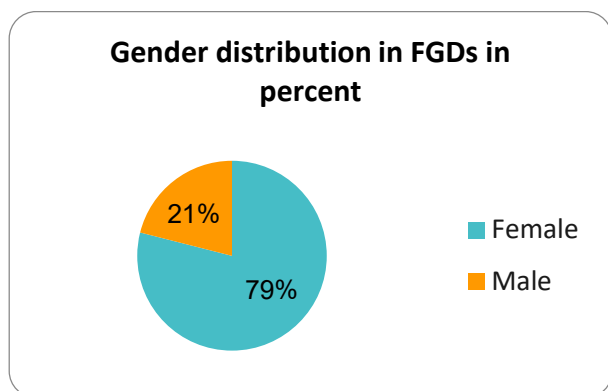


Figure 4: Gender distribution in FGDs in percent (own graph)

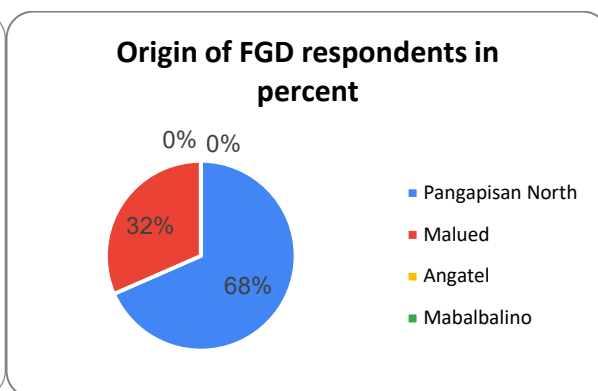


Figure 5: Community and origin of FGDs (own graph)

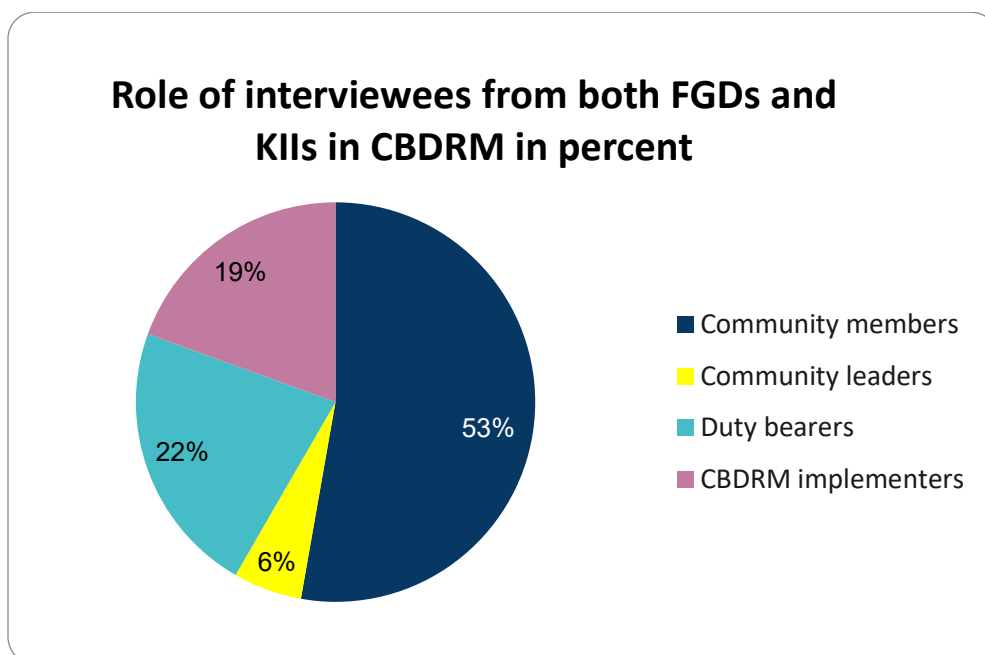


Figure 6: Role of the interviewees in CBDRM in percent (own graph)

## 2.2 Data Analysis

The two qualitative data sets from the FGDs and the KIIs were analyzed separately due to the differences in methodology, before comparing and complementing the insights gained. Although qualitative data analysis differs according to the specific theoretical interests of the research, common steps include data preparation, organization, and reduction through coding into themes to comprehend large data sets concerning the research questions (Creswell, 2013; Elliott, 2018; Rapley, 2007). This research follows the *Data Analysis Spiral* by Creswell (2013), which acknowledges the interrelation between the individual steps, thus emphasizing iterative movement in analytic circles. This is considered crucial for a complex topic such as trust and allows to include codes that emerge during the process (Elliott, 2018). To support this analysis process, the software NVivo was used for transcribing and coding.

Figure 7 gives an overview of the steps of the data analysis. First, the FGDs and KIIs were transcribed, translated, and organized according to the questionnaire (see Annex 1 & 2). Additional information, such as participant sociodemographics was marked for separate examination. The second step consisted of note-taking, and the texts were coded in paragraphs, with codes assigning symbolic meaning to the descriptive text (Creswell, 2013; Elliott, 2018). Next, these paragraphs were refined into smaller codes through iterative analysis, revisiting data if new codes emerged (Creswell, 2013). These codes were further reduced and organized into themes using mind-mapping, with themes being understood as an outcome of coding (Creswell, 2013) - focusing particularly on aspects related to trust and interrelation with other CBDRM aspects.

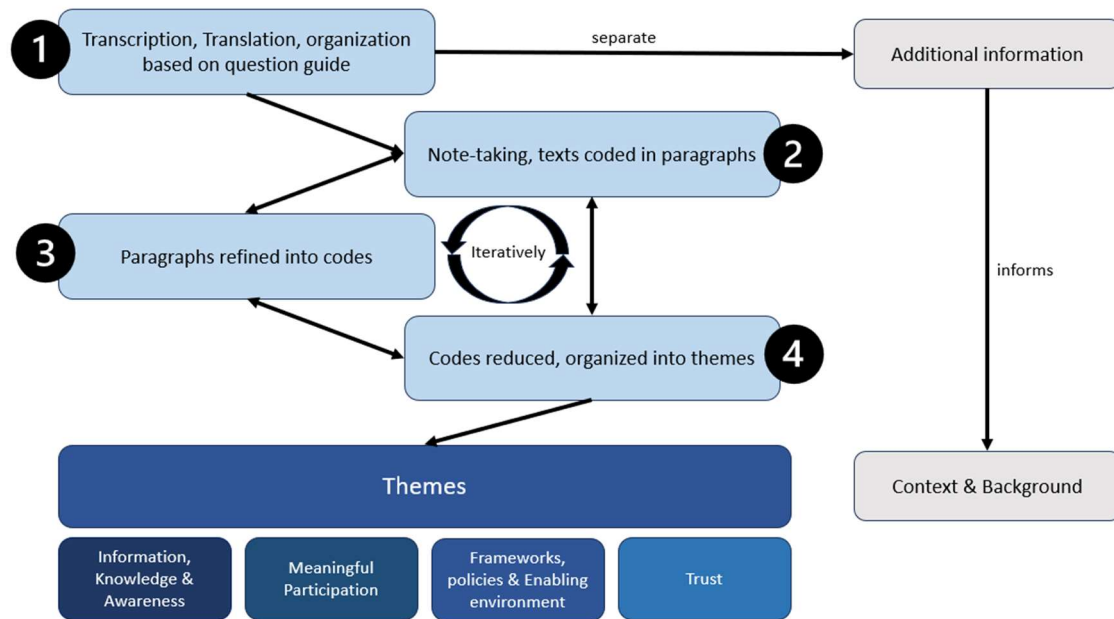


Figure 7: Data Analysis to inform the themes (own figure based on Creswell (2013))

The conceptual framework (compare Chapter 3.3) was adapted in the last step of the analysis according to the findings within the context of the communities in the Pangasinan region.

### 2.3 Limitations and Positionality

Several limitations of this research were identified, and categorized into methodological, logistical limitations, and ethical considerations. The researcher’s philosophical assumption and positionality are also discussed since the researcher’s different cultural and ethnic background, and native language influenced the data collection (Stewart-Withers et al., 2014).

The ontological assumption for this research blends an idealist perspective with a subtle realist approach as defined by Blaikie (2010). It acknowledges parts of reality, for example floods, as existing independently while believing that trust is context-dependent and influenced by culture, experiences, and power dynamics. The epistemological stance aligns with constructionism (Blaikie, 2010), acknowledging that this research is impacted by the biases and values of those involved. This includes inherent biases in literature, the interviewees' experiences, and the researcher’s background.

### **2.3.1 Methodological and logistical limitations**

While suitable for the research topic, the described methodology has drawbacks. Due to the small sample of key informants and the pre-selected nature of the interviewees, generalizability is limited (Basnet, 2018). However, focusing on specific cases offers the advantage of working with context- and culture-dependent topics namely trust. The predetermined questions and moderation of both FGDs and KIIs can influence results, highlighting the need to address potential biases (Acocella, 2011; Basnet, 2018). Managing power imbalances within FGDs requires a skilled moderator to ensure that all interviewees have the opportunity to speak up (Acocella, 2011; Basnet, 2018). This was challenging due to language barriers between interviewees, translator and researcher.

Conducting the KIIs in English offered the option for more follow-up questions without needing translation, but posed risks of lower-quality responses (Basnet, 2018), since English was both the researcher's and the interviewees' second language. Overall, the language barrier can be considered a major methodological limitation, potentially leading to misinterpretation or information loss. To minimize this, all FGDs and KIIs were additionally recorded, transcribed, and translated with the support of CDP.

Furthermore, this research is subject to various biases from both the researcher and interviewees, inherent in the specific settings of the chosen methodologies (Acocella, 2011; Roulston & Shelton 2015). For instance, social desirability bias may influence the interviewees' responses to align with perceived norms or stereotypes in the FGD setting (Acocella, 2011; Roulston & Shelton 2015). Also, confirmation bias could occur due to pre-existing beliefs for example by the literature search shaping the data interpretation, though strategies like seeking a representative sample may mitigate these biases (Roulston & Shelton 2015).

One of the main logistical limitations was the researchers' limited time in the Philippines, impeding a deeper cultural understanding of the communities. However, the researcher had done an internship in the same setting beforehand and therefore had at least a partial contextual understanding. Given the focus on rural communities in Pangasinan, limited public transportation, and safety concerns, there was a dependence on CDP to support the research coordination.

### 2.3.2 Ethical issues

One of the main ethical concerns in this research was the aspect of a *Western outsider* coming into the Philippines to research the sensitive topic of trust and then *leaving again* with the results. As described in the RADIX Disaster Studies Manifaesto-Accord (n.d.), there is a high risk of *discovery* of common knowledge, since CBDRM approaches have a long-standing tradition in South-East Asia (Brower et al., 2014; Victoria, 2003). This issue was amplified by the overall thesis strategy being rooted in Western research and the researchers' background at a Western university. Informed consent was ensured through signed consent forms, which were orally explained to the interviewees in their local dialect, outlining the research purpose, participation details, and its voluntary nature (Basnet, 2018). Interviewees were informed about the potential risks of being identified even after anonymization due to the rural focus of the research and about their right to decline participation, and to not answer questions in the interview (Social Research Association, 2021). The collaboration with CDP, who was perceived as trusted by the communities, aimed to address these ethical issues by ensuring cultural appropriateness and ensuring this research did no harm by accompanying the researcher. Simultaneously, this collaboration potentially impacted the results.

### 3. Conceptual Clarifications and State of the Art

This chapter gives an overview of key literature and conceptualizations of CBDRM and trust, the central concepts of this research.

#### 3.1 Concepts

CBDRM is seen as an approach that aims to increase CR (Van Niekerk et al., 2017). Trust, specifically social trust, is seen as a core to social capital, which is considered the main source of CR (Lee, 2019). Therefore, this chapter will introduce CR and community social capital as supporting concepts.

##### 3.1.1 Community-based disaster risk management and Sustainability

CBDRM is defined differently in the literature, with Van Niekerk et al. (2017) defining it as an “inclusive, active and owned community-driven process aimed at addressing the drivers of disaster risk creation, disaster risk reduction and societal resilience building within the context of local and indigenous knowledge and wisdom” (p.413), and describing it as a participatory process, with communities based at the center of the research process. Peng et al. (2020) use a slightly different term: community-based disaster management (CBDM - without risk), describe it as “an activity or action related to preparation for and coping with the results of disasters at the community level to reduce vulnerabilities and enhance resilience” (p.1) and also refer to participation as key for CBDM. Generally, three different terms could be identified: CBDRM, CBDM, and community-based disaster risk reduction (CBDRR). For this research, the term CBDRM will be used according to the *Philippine Disaster Risk Reduction and Management Act (2010)* (Republic of the Philippines, 2009). No differentiation will be made since all of these concepts focus on activities related to disaster prevention and mitigation at the community level (Peng et al., 2020; Van Niekerk et al., 2017).

Van Niekerk et al. (2017, p.415, 416) define two categories of stakeholders in CBDRM processes and state that their relationship is crucial: *insiders*, i.e. the community, and *outsiders*, often simultaneously the *implementers*, i.e. governments, NGOs, and the private sector. In this research, *implementer* refers to organizations *coming into* communities for CBDRM approaches. Usually, CBDRM approaches follow a series of similar steps, starting with selecting and building a relationship and trust with a community based on their vulnerability (Van Niekerk et al., 2017). This is followed by a participatory risk assessment, disaster risk

management planning, and finally training and implementing a disaster risk management committee supported by a monitoring and evaluation process (Van Niekerk et al., 2017). Some overarching principles of CBDRM programs were identified in literature, such as *participatory, responsive, multidisciplinary, empowering and developmental* and focus on proactive measures (Victoria, 2003, p.68). Furthermore, Zanotti et al. (2015) highlight the importance of reflecting on the power perspective between implementers and the community. Therefore, CBDRM is seen as a mediator giving the community a greater role in DRM while acknowledging the importance of including scientific risk assessments and planning, thus promoting harmony between bottom-up and top-down approaches (Pandey et al., 2012). In reality, the approaches often have shortcomings, meaning that even community-based projects tend to be run and implemented fully by external actors, leading to dependencies and difficulties, for instance in terms of trust, which impacts its sustainability (Matthies, 2017; Peng et al., 2020).

Although the term sustainability is widely used in CBDRM research, and linked to core subjects such as capacities, participation, and integration of CBDRM in overall development, it is scarcely defined (see Bonfanti et al., 2023; Paton, 2007; Peng et al., 2020; Shaw & Okazaki, 2004; Venton, 2008). The definition of successful and sustainable CBDRM in this research follows Moore et al. (2017), dividing sustainability into five parts:

(1) after a defined period of time, (2) the program, [...] and/or implementation strategies continue to be delivered and/or (3) individual behavior change [...] is maintained; (4) the program and individual behavior change may evolve or adapt while (5) continuing to produce benefits for individuals/systems (p.7).

### **3.1.2 Participation**

Participation, understood as the active involvement of individuals in a particular process, is considered *key* to successful CBDRM (Peng et al., p.1) as it empowers local actors, increases their capacities, and makes it possible to address local priorities more adequately (Cornwall, 2008). Simultaneously, the lack of a clear definition of which partners should participate and how is criticized for allowing convenient reframing by implementers to meet their specific purposes (Cornwall, 2008). Various sociodemographic characteristics, including economic status, gender, and ethnicity can influence participation in events (related to capacity and vulnerability), possibly leading to exclusion of certain population groups (Cornwall, 2008; Kuran et al., 2020). This is important to consider, since participants in

(CBDRM) activities are often taken to represent a wider community (Cornwall, 2008; Kuran et al., 2020).

### **3.1.3 Community, Community resilience and Social capital**

The term community is defined in different ways in the literature. Some focus on the shared characteristics of groups, others on geographical borders or combine both perspectives (Allen, 2006; Bernados & Ocampo, 2023; Van Niekerk et al., 2017). This thesis understands community as a group of people sharing common characteristics and as related to the concept of social capital, with norms and relationships binding members together, thus transcending geographical space, although often bound by town borders (Allen, 2006; Bernados & Ocampo, 2023; Van Niekerk et al., 2017). Nevertheless, a community is heterogeneous, and residents experience different access to resources and community institutions depending on their social status and capital (Allen, 2006). For this research, the term community will be used interchangeably with the term Barangays, the smallest political subdivision of Filipino municipalities (Mumm, 2017; Victoria, 2003).

Overall, CBDRM aims to increase the capacity and CR (Van Niekerk et al., 2017), which can be defined as “the collective ability of a neighborhood or geographically defined area to deal with stressors and efficiently resume the rhythms of daily life through cooperation following shocks” (Aldrich & Meyer, 2014, p.255). CR is significantly influenced by pre-existing socioeconomic and demographic characteristics including gender, income, and education (Lee, 2019). Moreover, social scientists widely accept social capital as a main source of CR, as it plays a pivotal role in making community life more sustainable and disaster resilient, for instance through increasing participation (Nenadović & Epstein, 2016; Paul et al., 2016).

Social capital can be defined as a “network of relationships among members of a society based on social trust, understanding and acceptance of cultural norms” (Khankeh et al., 2023, p.10). Theories behind social capital posit that the more people are connected, the more they will trust each other and the better off they will be individually and collectively (Mathbor, 2007). Accordingly, Lee (2019) refers to trust as the “core of social capital” (p.33), which in turn is regarded as a main source of CR (Han et al., 2020). In the Philippines, family and social networks outweigh government and Civil Society Organizations (CSOs) as providers of safety nets, relating to communities as “disaster fronts” (Allen, 2006, p.85; Peng et al., 2020, p.1). This demonstrates the importance of considering social capital and trust for CBDRM.



### **3.1.4 Trust and social trust**

This research follows Peng et al.'s (2020) definition of *social trust*, as the “belief that most people and management institutions are generally reliable and honest” (p.3). They further divide social trust into horizontal trust (interpersonal trust, e.g. friends, neighbors) and vertical trust (institutional trust, e.g., local government or authority) (Peng et al., 2020). This categorization is used to explore the role of trust within communities and toward CBDRM implementers. However, the use and definitions of trust vary widely in the literature. This is highlighted by Fornalé et al. (2023), reflecting on the lack of a common framework which they relate to the concept's importance and adapted use in various academic fields, from sociology to philosophy, and more recently disaster and climate studies.

Trust is shaped by various factors, for instance cultural context and societal values, where Khankeh et al. (2023) note higher social trust in societies with higher or similar income levels, education and ethnic backgrounds. Power inequalities seem to foster distrust and hinder cooperation, though scholars debate the exact relationship between power dynamics and trust, if one needs to be powerful to be trusted or if power drives out trust (Nunkoo & Ramkissoon, 2012). Ter Huurne and Gutteling (2009) describe an asymmetry principle on the fragility of trust: trust is hard to build, but easily destroyed, and trust and distrust are created and maintained differently.

### **3.2 State of the Art**

This chapter provides an overview of literature on the role of trust in CBDRM. The field of CBDRM in the Filipino context has already been studied by various scholars, including Allen (2006), Matthies (2017), and Victoria (2003). Various others have touched upon trust in a broader DRM context such as Bonfanti et al. (2023), Han et al. (2020), Khankeh et al. (2023), Paton (2007), Siegrist et al. (2005) and Xue et al. (2021). While all of these sources highlight the importance of trust in the broader DRM context, only two case studies, both co-authored by Deng (Peng et al., 2020; Ma et al., 2022), could be identified that focus specifically on the role of trust in community approaches.

### **3.2.1 CBDRM in Philippines**

Victoria (2003) describes current approaches of CBDRM in the Philippines, highlights challenges, and suggests the need for CBDRM to be complemented by top-down approaches, as the vulnerabilities inherent in the Filipino system cannot be reduced by communities alone. Both Allen (2006) and Matthies (2017) highlight the existing reliance on external actors and funders in typical CBDRM approaches, thus contrasting Victoria (2003). Furthermore, both emphasize the importance of social capital for fostering long-term resilience of communities - essential for achieving sustainable CBDRM (Allen 2006; Matthies, 2017). However, the big gaps in years and their different research focus should be considered. Matthies (2017) focuses their research more on the Purok System, an Indigenous system of sub-structure and self-organization in the Philippines, and presents it as an alternative to standard CBDRM approaches. Meanwhile, Allen (2006) highlights power imbalances between local institutions, residents, governments and donors, emphasizing the need for strong social and political capital - which is in turn linked to trust – to achieve sustainable CBDRM.

### **3.2.2 Trust and DRM**

Several researchers emphasize the critical role of trust in DRM both post-disaster, where it is seen to reduce suffering and confusion if affected populations trust relief organizations, and pre-disaster where it is considered to foster social capital, enhance participation, and contribute to development (Bernados & Ocampo, 2023; Khankeh et al., 2023; Peng et al., 2020). Conversely, findings indicate that insufficient trust levels and unsupportive governance structures negatively impact CR, possibly perpetuating self-reinforcing cycles that erode trust by impeding resource access and inclusion in DRM processes (Bonfanti et al., 2023). Similarly, Han et al. (2020) point out the relevance of trust for enhancing CR but highlight research gaps, noting limited studies on trust in DRM stakeholders, with those existing showing inconsistent and conflicting results likely influenced by cultural and historical factors. This highlights the complexities of the research on trust, pertinent to this research.

Xue et al. (2021), as some of the few authors investigating trust in stakeholders in community management organizations, found that higher levels of trust led residents to seek help and actively establish a relationship with the community. Their findings suggest that greater trust reduces residents' perception of the probability and threat of disasters, but increases their self-efficacy (Xue et al., 2021). Similarly, others underscore trust's significance

in risk perception, with Siegrist et al. (2005) defining trust as a multidimensional construct rooted in social relations and positive expectations towards systems, noting that some individuals demonstrate a stronger tendency to trust, with women and younger people showing a higher risk perception. Paton (2007) highlights the often-overlooked relationship between communities and disaster information source, emphasizing the influence of trust on how information is perceived. These findings echo those of Han et al. (2020), and highlight the complexity of the topic since trust is influenced by cultural and historical factors.

### **3.2.3 Trust and CBDRM**

Only two case studies specifically studying trust in community approaches could be identified, both for the Chinese context. The first, by Peng et al. (2020), focuses on trust as one of three components of community social capital for CBDRM. Their mediation model investigates how social trust, self-efficacy - as the belief in the ability to act for one's goals - and place attachment - as an emotional connection between individual and place - mediate or moderate participation in CBDRM (Peng et al., 2020) and forms part of the conceptual framework for this thesis (see Chapter 3.3). Ma et al. (2022) build their hypotheses upon Peng et al. (2020), to explore the relationship between place attachment of farmers, community trust, and community behavior. They conclude that the stronger the local attachment and trust in the community, the stronger the behavioral intention to participate in the community (Ma et al., 2022).

Thus, while a wide range of literature focusing on CBDRM approaches could be identified, underscoring the importance of trust and social capital for achieving CR, specific research focusing on the role of trust in CBDRM - especially in the Filipino context - was limited.

## **3.3 Conceptual framework**

This research adopts frameworks from literature to guide its methodology in understanding the role of trust in CBDRM. Since participation is understood key for CBDRM and closely links to high social capital (and therefore trust), a framework by Peng et al. (2020) informs the understanding of community members' participation in CBDRM. This framework is based on social trust, place attachment, and self-efficacy. This community social capital is seen as a collective intangible resource contributing to common community goals, and is correlated with cooperative behavior and disaster preparedness (Peng et al., 2020).

Additionally, Fornalé et al. (2023) introduce a framework depicting trust as a circular dynamic connecting citizens and authorities, where trust serves as a process and breeding ground where memories and biases of citizens and authorities converge to produce knowledge. This framework acknowledges the historical component of trust, particularly the impact of disasters on communities with a complex history of oppression and biases - challenging both horizontal and vertical trust (Fornalé et al., 2023).

Thus, the conceptual framework for this research shown in figure 8 places social trust as core of social capital, positioned between community memories and implementer biases in CBDRM, as proposed by Fornalé et al. (2023). Trust, along with self-efficacy and place attachment, is believed to influence participation according to Peng et al. (2020). Since participation is seen as key to CBDRM, it is placed between trust, the other factors and CBDRM, which in turn aims to increase CR. Thus, this integrated framework synthesizes ideas from Peng et al. (2020) and Fornalé et al. (2023) and is adapted according to the findings of this research in chapter 5.6.

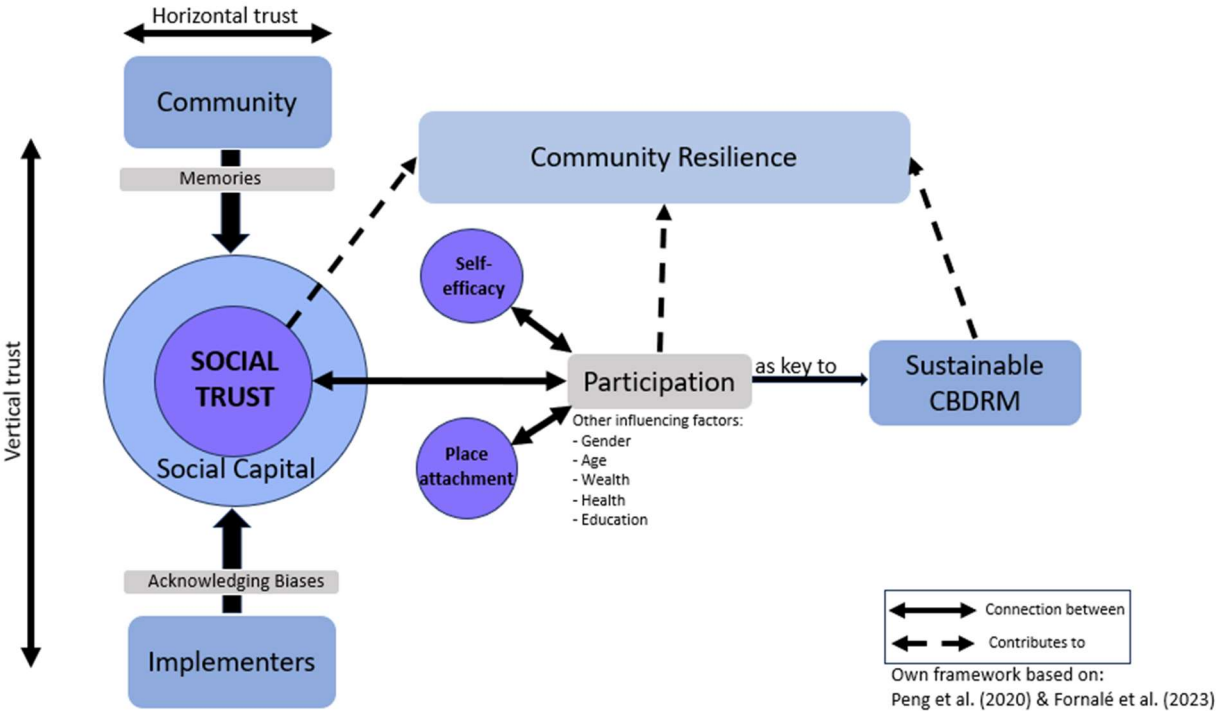


Figure 8: Conceptual framework created based on Fornalé et al. (2023) and Peng et al. (2020)

## **4. Contextual Background and Research Area**

Since CBDRM approaches should be adapted to the local context to be successful (Matthies, 2017; Van Niekerk et al., 2017), this research focuses on four Barangays in the Pangasinan region to gain an understanding of the role of trust within this context. Since DRM is intricately linked to political and socio-historical contexts (Brower et al., 2014), a brief overview of the Filipino context is provided.

### **4.1 Geographical and Political context**

The Philippines is an archipelagic state consisting of 7,641 South-East Asian islands, divided into three main geographical parts: Luzon, Visayas, and Mindanao (Brower et al., 2014). Its location on the western rim of the Pacific Ring of Fire and Typhoon Belt makes it susceptible to various natural hazards, such as earthquakes, tsunamis, volcanic eruptions, and typhoons (Brower et al., 2014; Fernandez et al., 2012; Matthies, 2017). The Philippines were colonized for 381 years, and due to its geographical spread, the islands had different colonial experiences, leading to inequalities and ethnolinguistic diversity, with many power imbalances and dependencies visible still today (Bankoff 2003; McDoom et al., 2018; Ruaburo, 2016).

Gender dynamics in the Philippines reflect the countries' historical shifts influenced by pre-colonial norms favoring a "matriarchal society" (Sobritchea, 2005, p.529), where women historically held significant power and economic roles (Ramalho, 2019). The colonization altered gender roles, introducing patriarchal elements, leading to contradictory societal gender expectations (Aguilar, 1988). Today, the Philippines is reputed as the most gender-equitable country in Asia, with more women than men in high positions (Ramalho, 2019; Interviews). However, especially in rural and low-income areas, women face fewer educational opportunities and more caregiving responsibilities, while men work in agriculture (Ramalho, 2019; Interviews).

Although the Philippines is classified as a rising lower-middle-income country it struggles with high levels of poverty, inequality, and corruption, ranking 61st on the Fragile State Index (Brower et al., 2014; McDoom et al., 2018; The Fund for Peace, 2023). Furthermore, environmental degradation, combined with poverty contributes to more informal settlers in high-risk areas (Tan, 2022). Thus, since disaster risks are linked to this cycle of poverty, socio-economic inequality, environment, and governance, the Philippines' geographic location in combination with its socio-economic conditions make it one of the most

disaster-prone and climate-change-impacted countries in the world (Brower et al., 2014; Bündnis Entwicklung Hilft/IFHV, 2023; Matthies, 2017).

## **4.2 Disaster Risk Management in the Philippines**

Historically, the Filipino DRM approaches aligned with international practices, focusing primarily on top-down approaches - however, the country's recurrent disasters showed limitations in this stance (Brower et al., 2014). The necessity for alternatives and a strong cultural component of cooperation fostered grassroots self-help efforts, notably led primarily by women, who are considered the main force behind development approaches (Fernandez et al., 2012; Ramalho, 2019; Victoria, 2003). In 2010 the *Disaster Risk Reduction and Management Act (Republic Act 10121)* officially introduced CBDRM, marking a shift in Filipino DRM (Brower et al., 2014; Tan, 2022). Despite this progressive legislation, implementation gaps persist (Brower et al., 2014).

Several government and private initiatives have advanced CBDRM in the Philippines. For instance, the *Hazards Mapping and Assessment for Effective Community-Based Disaster Risk Management* project, initiated in 2005 aimed to systematize CBDRM and identified 43 provinces for implementing CBDRM (Asian Disaster Preparedness Center [ADPC] et al., 2023). Another example is the *Scaling Across Integrated Risk Management at the Local and National Level* (SAIL) project implemented by CDP, emphasizing holistic CBDRM approaches to promote resilience in the Pangasinan region. Three of the chosen cases (Pangapisan Norte, Angatel, and Mabalbalino) are currently part of this project (internal documentation, CDP).

## **4.3 Introduction of the cases**

This research focuses on four communities - Malued in Dagupan, Pangapisan North in Lingayen, Angatel in Urbiztondo, and Mabalbalino in San Carlos. All communities are located in the Pangasinan region of Luzon, Philippines. Given the limited published information on these communities, their descriptions were constructed through interview insights and internal documentation by CDP. The region's climate is characterized by a dry season from November-May and a wet season from June-October, with heavy rainfalls in July and August (City Government of Dagupan, 2023). The communities were selected based on their involvement in past or ongoing CBDRM projects implemented by CDP. Furthermore, their location in the Agno River Basin makes them susceptible to regular floods, showing the

necessity for understanding what influences the success and sustainability of CBDRM, such as the role of trust. Figure 9 shows the communities within their cities and the Pangasinan region. Due to limited geographical data, these communities are hand-mapped and, therefore cannot claim to be completely accurate.

The study area in the Pangasinan region

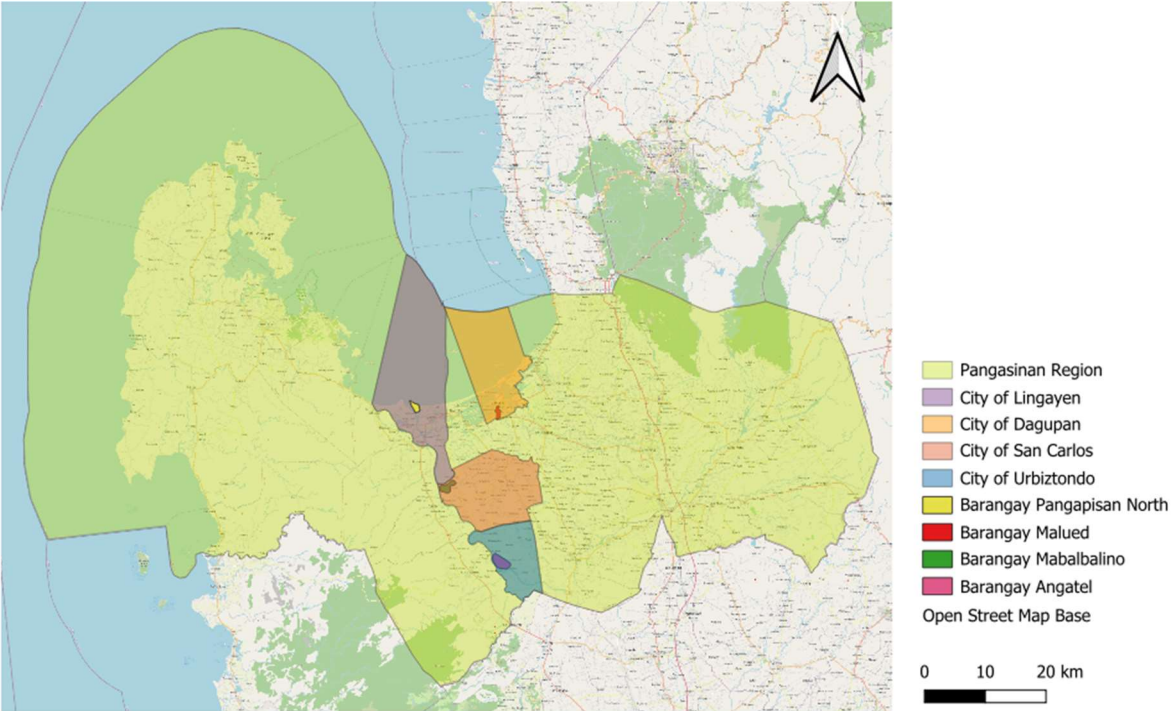


Figure 9: QGIS Map of the study area in the Pangasinan region (own graph, mapped with QGIS, OpenStreetMap base)

### 4.3.1 Malued in Dagupan

Malued is situated within Dagupan city (City Government of Dagupan, 2023), has a population of 9,265, and a history of flooding due to its low-lying location surrounded by mountains, the sea, and crossed by seven rivers (City Government of Dagupan, 2023; PhilAtlas, 2024d). It experienced two major floods in 2010 and 2018 (Interviews). The main livelihood sources are agriculture with aquaculture and municipal fishing followed by trade, industry and tourism (City Government of Dagupan, 2023). One interviewee described Malued as “a lake”, with parts of the community residing in floating houses made from Bamboo. Malued underwent political and structural changes since finishing its CBDRM process, including new Barangay leadership (Interviews). Figure 10 shows the location of Malued within Dagupan City.

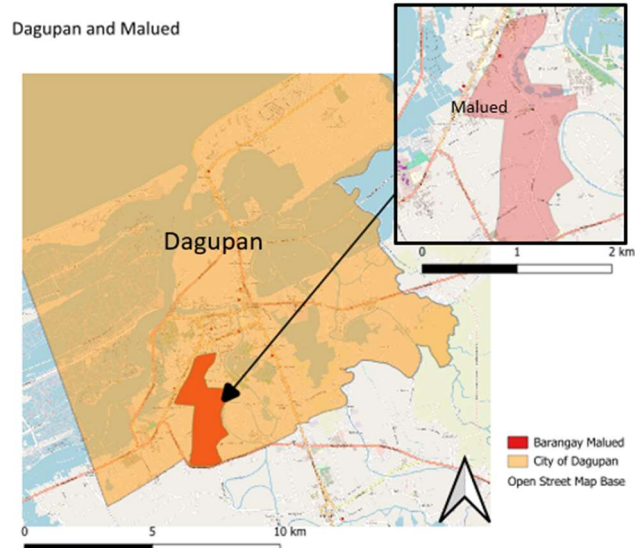


Figure 10: The Barangay Malued in Dagupan (own graph, mapped with QGIS, OpenStreetMap base)

### 4.3.2 Pangapisan North in Lingayen

Pangapisan North is situated within Lingayen, the provincial capital city (PhilAtlas, 2024b). The main sources of livelihood are agriculture, fishing, and tourism. Lingayen borders the Lingayen Gulf and has a history of flooding, which led to the construction of a seawall from Lingayen to the neighboring town Binmaley (Cardinoza, 14.09.2023; International Collective in Support of Fisherwork, 2023). Pangapisan North, with a population of 8,502 residents, is considered to have the highest poverty rates in Lingayen and has the local nickname *Waterworld* since floods can last up to 2 months (PhilAtlas, 2024e; Interviews). Figure 11 shows the location of the Barangay within Lingayen.

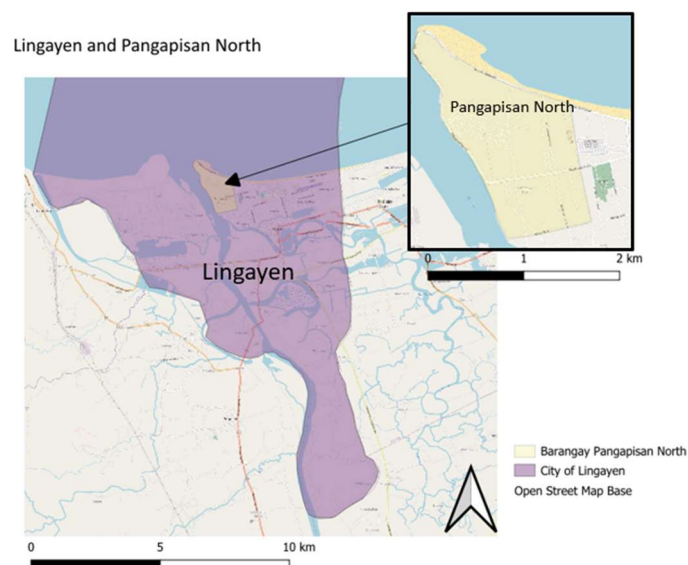


Figure 11: The Barangay Pangapisan North in Lingayen (own graph, mapped with QGIS, OpenStreetMap base)



### 4.3.3 Angatel in Urbiztondo & Mabalbalino in San Carlos

The communities of Angatel and Mabalbalino were not initially targeted for this research, but since some KIIs took place there, they are included with a lesser focus. Angatel is located in the municipality of Urbiztondo (PhilAtlas, 2024g). The Barangay has a population of 3,151 and is also prone to flooding due to its location (PhilAtlas, 2024a). Its main livelihoods include farming, bamboo crafts, with children also contributing as wage earners through selling food and non-food items (Interviews). Mabalbalino is located in the city of San Carlos (PhilAtlas, 2024f). Mabalbalino has a population of 1,936 and is situated close to a wide part of the Agno River, with corn as its main agricultural product (PhilAtlas, 2024c; Interviews). Figure 12 shows the location of the Barangays in the region.

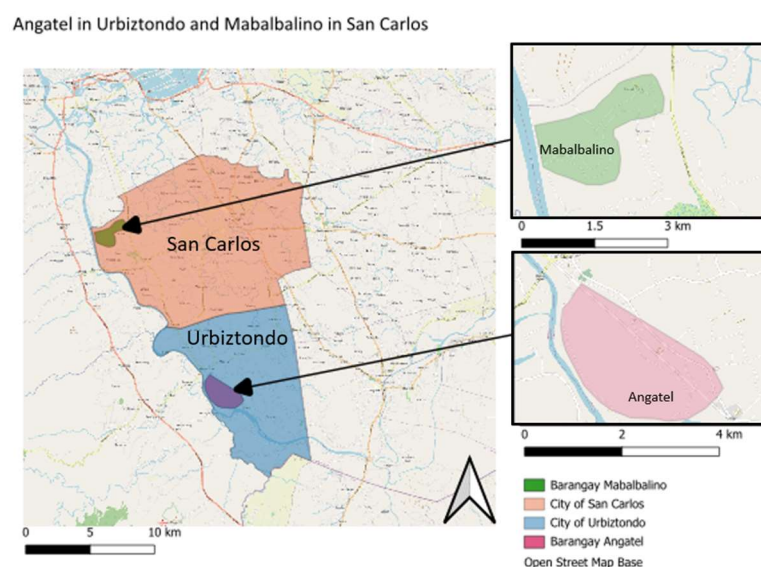


Figure 12: The Barangays Angatel in Urbiztondo and Mabalbalino in San Carlos (own graph, mapped with QGIS, OpenStreetMap base)

Despite belonging to different cities and being spread out over a large area, all these communities are susceptible to floods due to their location in the Agno River Basin. Furthermore, their shared experience working with CBDRM approaches implemented by CDP adds even more value to their input.

## 5. Results and Discussion

This section illustrates and interprets the primary data from FGDs and KIIs, and integrates the findings with the existing literature. This approach combines analysis and discussion, as the qualitative nature of the value-laden topic of trust makes an immediate discussion of the findings suitable. The research questions are addressed based on categories of factors for sustainable CBDRM that emerged from the data analysis, with particular focus on the role of trust. These insights inform the adaptation of the conceptual framework. Figure 13 shows the themes that emerged, discussed in the following sections.



Figure 13: Themes that emerged from the FGDs and KIIs as factors influencing the success and sustainability of CBDRM (own graph)

### 5.1 Information, Knowledge and Awareness

Participants in both FGDs and 15 out of 17 KII interviewees emphasized the importance of knowledge about and understanding of hazards and vulnerabilities for successful CBDRM. Three CBDRM implementers referred to *Article III Section 7 of the Bill of Rights (1987)* on the right of information: “The right of the people to information on matters of public concern shall be recognized [...]”, stating that people residing in high-risk areas have the right to know about their risks and vulnerabilities to be able to protect their families and lives. Pearce (2003) supports this, explaining that historically officials withheld information on hazards out of fear of panic spread, but acknowledges the community members’ right to knowledge and participation in decision-making on these difficult topics.

The interviewees expressed different views on the levels of pre-existing community awareness regarding hazards, particularly floods. One duty bearer and one CBDRM implementer referred to lack of awareness as a primary challenge in motivating members for participation (further explained in Chapter 5.2.1), while especially community members observed high existing knowledge and awareness, which they attributed to the frequent occurrence of floods. All interviewees stated high levels of self-efficacy and highlighted confidence in their abilities to improve disaster outcomes through CBDRM. However, it should be noted that those interviewed were active in CBDRM efforts, which likely contributed to their heightened awareness and self-efficacy compared to non-interviewees. Rogayan and Dollete (2020) had similar findings on differing levels of awareness in northern Luzon, stating high awareness of frequently experienced hazards and lower awareness of others. This could be attributed to disaster experience promoting disaster awareness (Hoffmann & Muttarak, 2017). Furthermore, these differing awareness levels were linked to the availability of information about hazards (Rogayan & Dollete, 2020).

Annual floodings in all communities were reported, sometimes lasting for extended periods from a week to months. Based on this, two duty-bearers noted challenges of community members becoming accustomed to the floods, and displaying “hard-headed” attitudes, such as not evacuating. This was attributed to lower levels of risk perception, with one duty bearer describing it as follows: “there are some people that prefer to stay in their house because every year they encounter this flooding, [...] so they think it will not do harm, so they only put their things up”. Cajilig et al. (2020) tried revealing the reasons for non-evacuations during the Typhoon Haiyan / Yolanda in the Philippines and explained residents’ decision to stay due to familiarity and acceptance of disaster risks as part of daily life. This phenomenon and what has been described as a developed “sense of invulnerability” (Bankoff, 2003, p.2-4) could be found in other literature, especially for residents of high-risk areas to be able to lead lives without constantly worrying about potential dangers (Bankoff, 2003; Janoff-Bulman, 1992). However, various community members and four CBDRM implementers stated reasons for non-evacuation beyond familiarity, such as a lack of knowledge, limited evacuation options, and the need to protect their livelihoods. Cajilig et al. (2020) discusses similar factors, for instance understanding, knowledge, and cultural factors as impacting non-evacuation, placing people within relationships of power, and psychological processes influencing choices in disaster situations.

The interviewees mentioned various measures to increase knowledge and information dissemination. Four CBDRM implementers highlighted that to understand the existing knowledge levels, the effective local mechanisms for self-help and grassroots organizations must be acknowledged by implementers. A self-established host family system in Malued was mentioned as an alternative to evacuation centers, which enabled community members to stay close to their homes and livestock during flooding and one duty-bearer gave examples of relevant existing Indigenous Knowledge, such as observing ants climbing to higher ground with food on their backs before floods. The importance of including local knowledge in DRM is reflected by Bernados and Ocampo (2023).

## **5.2 Meaningful Participation**

All interviewees agreed when asked if participation is the key to sustainable CBDRM: “There is no CBDRM if the participation is not there”. This echoes findings from the literature, such as Peng et al. (2020), linking project failure to a lack of engagement and project success to community involvement. Here, the willingness of the community was mentioned, which is mirrored by Cornwall (2008) stating that even well-intentioned participation efforts can fail if intended beneficiaries choose not to participate. Two CBDRM implementers highlighted the importance of meaningful participation, driven by community needs and inclusiveness of the CBDRM process. They discussed concerns about the vagueness of the concept of participation, which is also discussed in the literature, pointing out the risk of participation being reframed to almost anything involving people (Cornwall, 2008; Pouligny, 2009). One participant noted that while participation is crucial, other factors also contribute to successful and sustainable CBDRM: “Yes, participation is a key in CBDRM. But [...] there are a lot of keys to open the box”. Overall, interviewees agreed on the importance of participation, but acknowledged various challenges in encouraging participation, dependent on various factors, such as awareness, information, inclusiveness and trust.

### **5.2.1 Awareness, Knowledge and Participation**

Interviewees emphasized a link between information, knowledge, awareness, and participation in CBDRM. One CBDRM implementer cited awareness as the primary reason for participation, noting that low awareness poses challenges. Possibly connected, three more CBDRM implementers and one duty bearer mentioned challenges in changing the pre-existing mindsets, with participation being low first, but increasing if communities are reminded about

their risks, and recognize the benefits of participating. Literature supports the effectiveness of regularly reminding communities about their vulnerabilities to increase awareness and participation, with Fornalé et al. (2023) emphasizing the importance of preserving memories of past disasters to developing a culture of risk management and Allen (2006) suggesting that cooperation is more likely when community members perceive increased vulnerability to hazards. On the other hand, Ma et al. (2022) discuss that living in a dangerous environment could exasperate the sense of distrust and potentially lead to non-participation, especially in case of limited resources. These different findings show the complexity of the topic and raise questions of how to achieve participation by informing residents adequately of their risks, without sparking distrust or non-participation, especially in connection to the mentioned right to information.

Furthermore, interviewees stressed this right and the need to be equipped with knowledge and practices to manage these risks through CBDRM activities, seeing training as empowerment. One duty bearer emphasized the power and responsibility that come with knowledge, suggesting that informed individuals are more likely to be responsible, participatory, and active in managing risks. Also, clear communication of project goals and the communities' role in CBDRM was highlighted as crucial. This sentiment was shared by others and is also mirrored in literature. For instance Pandey et al. (2012) or Zanotti et al. (2015), highlight a connection between knowledge and participation. One interviewee underlined the importance of trustworthy sources of information when encouraging participation. This is mirrored by Paton (2007) noting that the relationship between the information source and the recipient influences the actions more than the content itself, especially in situations of great uncertainty. Trust is therefore crucial in uncertain situations, and viewed as inversely linked to the need for information, a sentiment that is echoed by others (Cologna & Siegrist, 2020; Siegrist et al., 2005; Ter Huurne & Gutteling, 2009). This was summarized by one interviewee as follows: "It's really important for the organization to provide and let the community understand the very purpose [...], and I think letting them understand [...] would help in the establishment of trust".

### 5.2.2 Cultural aspects

All interviewees highlighted cultural factors affecting participation, such as the Filipino CSO background, cultural aspects of cooperation, and the influence of the local leaders.

Seven interviewees specifically emphasized the impact of the strong Filipino CSO background on the outcome of CBDRM and the importance of including the Indigenous Purok system, a sub-structure of each community. This aligns with literature, which attributes the country's robust self-help efforts to its vulnerability, history of social movement, and a general culture of cooperation, facilitating the adoption of CBDRM and points to the Purok as a source of resilience with proven efficiency in the Typhoon Haiyan, where whole islands were saved using the Purok system (Bernados & Ocampo, 2023; Fernandez et al., 2012; Matthies, 2017; Victoria, 2003).

More than half of the interviewees (12 & one FGD) frequently referred to this culture of cooperation and helping without expecting anything in return called *Bayanihan* as making CBDRM possible in their communities. One respondent attributed the high level of engagement in CBDRM in their community to strong family ties and social obligations to help neighbors: "if we talk about programs that affect the community, we talk about our very own families". This is mirrored by Bernados and Ocampo (2023), describing the Filipino communities as going beyond geographical boundaries, fostering trust, collaboration, and social capital through networks and relationships. Similarly, many community members cited wanting to protect loved ones as main motivators for participating in CBDRM, highlighting the family's main role as "safety-net providers" (Allen, 2006, p.85). Furthermore, Pandey et al. (2012) mention the existing "culture of coping with crisis" (p.5) in Asia and point out its relevance for enhancing CBDRM sustainability.

Both FGDs and almost all interviewees (14) highlighted the influence of leaders' behavior on participation in CBDRM: "if they see their leader who is actively participating, involving themselves in this kind of project, [...] they will eventually follow what their leader is doing". This was attributed by one duty bearer to the bandwagon effect, where individuals adopt the views or activities of the majority (Bindra et al., 2022). Similarly, the literature points out the existing cultural practice of consensus-forming, which is relevant to consider since CBDRM projects may be colored by existing local power struggles (Allen, 2006).

Notably, only male interviewees mentioned gender-related factors, suggesting the influence the leaders' gender had on the participants' sociodemographics, attributing

women's higher participation to the female community leaders. This could be related to the predominance of women in leadership positions and the complex Filipino gender landscape, where women are described as main drivers behind development efforts (Ramalho, 2019; Sobritchea, 2005; Victoria, 2003).

All community members expressed strong place attachment, but two male community members and four CBDRM implementers also highlighted a place dependence tied to their livelihoods, particularly in vulnerable communities. On the one hand, this was seen as positively influencing participation, as community members sought to protect their families and assets, which is reflected by various researchers, who also highlight a possible link between social trust and arising place attachment and less inclination to engage in community activities if there is a low sense of community belonging (Cornwall, 2008; Ma et al., 2022; Peng et al., 2020). On the other hand, place dependence was considered challenging for participation, since a day-activity would mean losing the income of that day. Also, Fernandez et al. (2012) note that participation can entail short-term costs in terms of time, energy and lost opportunities that have to be weighed against the benefits of participating. Cornwall (2008) raises a similar issue and questions the benefits for community members versus implementers, which they suggest impacts the usual sociodemographic characteristics of CBDRM participants, requiring a strategy on how to sustainably involve vulnerable sectors. This was supported by the CBDRM implementers and community members, who described that since men often work in agriculture, greater flexibility is attributed to the women's schedule, making them and elderly people the main participants. Interviewees suggested measures to balance this participation through incentives, for instance offering food or packages to take home, to ensure the family could eat without the wages of that day.

### **5.2.3 Inclusiveness and Accessibility**

Several interviewees stressed the importance of making participation inclusive, with one CBDRM implementer emphasizing multi-sectoral participation, the need to draw inspiration from vulnerable sectors and designing programs based on their capacities and needs. Since the most vulnerable are often the most affected by disasters, it is crucial to include their experiences, necessitating an intersectionality perspective in solution design (Fornalé et al., 2023). Various researchers underscore this need for genuine multi-sectoral participation as key for enhancing CBDRM sustainability since it impacts whose voices are heard and taken to represent the community (Pandey et al., 2012; Zubir & Amirrol, 2011). In

the interviews, especially the need for better inclusion of PWD and more male participation was highlighted. One CBDRM implementer, notably a PWD themselves, highlighted different measures to increase accessibility, related to communication barriers, venue accessibility, and the timing of activities to accommodate seasonal work patterns within the community, for example in the rainy season when fewer men work on the fields. Cornwall (2008) notes that there is usually little thought given to reasons that promote non-participation, such as the timing and duration of activities or people feeling like they have nothing to contribute, showing the importance of actually talking to community members to understand their needs and leverage their knowledge for suitable activities.

All CBDRM implementers and four duty-bearers stressed the importance of aligning participation levels and sectors with community needs and aspirations, acknowledging the complexities of who to include and how, making a predetermined format difficult. Furthermore, the necessity to include the pre-existing Indigenous structures and a failure to do so was highlighted as a potential reason for distrust. Matthies (2017) supports this, highlighting the potential for increased sustainability by leveraging these existing systems that remain in place after project completion. Similarly, Fornalé et al. (2023) advocate for locally tailored solutions over official standardized ones, emphasizing the need for integration into the communities' subjective reality of power dynamics and local knowledge. Furthermore, Cornwall (2008) notes a big difference in participation between spaces created through invitation or created by people for themselves, also affecting the local ownership. This underlines the necessity of understanding and working with existing capacities.

While only one CBDRM implementer explicitly mentioned *local ownership*, it could be argued that the discussion around CBDRM's sustainability is inherently intertwined with this concept. Local ownership is considered a powerful tool to empower local actors and essential for effective development, yet challenges due to lack of a common definition and implementation gaps are criticized by various researchers (Balugo, 2009; Gatdula, 2020; Hagelsteen & Becker, 2013).

#### **5.2.4 Trust and participation**

When asked what factors influence participation of community members in CBDRM, six interviewees and one FGD specifically highlighted trust as a significant factor. This is noteworthy considering questions specifically on trust were only asked later, thus trust was mentioned independently. Furthermore, some answers focused on relationships or respect,



which also relate to trust. They emphasized the relevance of trust for cooperation and participation, stating that without trust community members would not engage: “Trust is essential, [if there is no trust] they would not cooperate, and they would not come”; “They participate because they trust you as the implementer. If they don’t have [...] trust in you, I think no community will attend your activity”. These perspectives align with findings in literature, underscoring the role of mutual trust in promoting participation, for example Khankeh et al. (2023) found that social trust enhances participation and in turn contributes to creating social capital. Similarly, Bernados and Ocampo (2023) emphasize the connection between trust, cohesion, and reciprocity, and point out how trust can mobilize residents to participate in community-based activities (see also Hosseini et al., 2017; Ma et al., 2022). One CBDRM implementer described their experiences with a stakeholder meeting that had to be conducted several times since no community members participated, which they attributed to a lack of trust stemming from negative past experiences with other implementing organizations. Cornwall (2008) describes this as participation fatigue, where communities become disengaged after being asked to participate several times without positive results.

Simultaneously several authors, including Tan (2022) stress the necessity of diverse perspectives to better understand factors driving public participation in community activities. Different studies highlight various factors next to trust, such as place attachment, risk perception, and ownership, but also perceived responsibility as influencing participation on different levels (Bernados & Ocampo, 2023; Ma et al., 2022; Peng et al., 2020; Samaddar et al., 2016).

### **5.3 Frameworks, policies and enabling environment**

Furthermore, the need for clear policies and frameworks to create an enabling environment for the CBDRM process was emphasized. The interviewees also highlighted the influence of politics, including how politics shape the policy and framework landscape and linked it to power relationships.

Two interviewees highlighted existing policies and frameworks related to CBDRM, such as the Bill of Rights, formulating the right to information, and frameworks on protecting Indigenous communities in research, or the Republic Act 10121, which promotes multi-sectoral participation and governance principles in CBDRM (Republic of the Philippines, 2009). Despite the existence of these frameworks, some gaps and concerns were raised by about half

of the CBDRM implementers, calling for stricter implementation, transparency and adaptation to the community. Furthermore, the importance of clearer policies concerning finances, resource allocation, and sector responsibilities on community level was emphasized. However, the consensus among the implementers was that the challenges are not in the absence of policy, but mainly its implementation, which is echoed by Brower et al. (2014) who note shortcomings in implementing the existing laws in the Philippine governance landscape, rather than a lack.

### **5.3.1 Politics, policies and sustainability**

Nine of the interviewees, mainly CBDRM implementers and duty-bearers noted a critical link between politics, policies, and the sustainability of CBDRM activities. There seemed to be an accord on the necessity of involving the LGU, highlighting that CBDRM would struggle to sustain without alignment of their goals to local authorities. Literature mirrors a need to involve (and empower) local authorities and emphasizes the political context that CBDRM is embedded and operates within (Allen, 2006; Fornalé et al., 2023; Zubir & Amirrol, 2011).

Two interviewees indicated challenges arising due to political turnover, giving examples of complete CBDRM knowledge loss with the change of one politician after project completion. They suggested policies that ensure knowledge transfer as a potential solution, giving the example of a Barangay where government members trained in CBDRM automatically become certified trainers supporting project continuity. Similar concerns about CBDRM sustainability related to policies are noted in various articles, stating a recurring theme of successful projects during the implementation, but failing to be sustainable after project completion (Pandey et al., 2012; Zubir & Amirrol, 2011). Similarly, various authors point out that although the aim of CBDRM (or other development projects) is empowerment, approaches are often associated with dependency on external actors, neglecting local knowledge and true capacity development (Allen, 2006; Cornwall, 2008; Mumm, 2017; Zanotti et al., 2015). This shows the importance of sound exit strategies for project implementers and the need to allocate benefits equitably post-project.

Furthermore, duty-bearers stressed the necessity of stable finances and budget regulation to sustain CBDRM beyond project completion. Two described their significant overtime commitment and highlighted the need for additional budget support to replicate the project in other communities. CBDRM has the risk of burdening LGUs if increased working time is not matched with increased access to finances, resources, and decision-making power

(Allen, 2006; Pandey et al., 2012). Moreover, two CBDRM implementers emphasized the necessity of a governmental sustainability plan for CR, which recognizes existing policy overlaps and gaps between the local and national levels. They stated the need for the government to recognize its power to empower the communities by addressing the root causes of vulnerability, particularly poverty, where gaps in funding and aid priorities were pointed out. This is mirrored by various scholars, stating that the vulnerabilities in the Philippines are rooted in a socioeconomic political system characterized by unequal access (Brower et al., 2014; Jones, 2009; Victoria, 2003).

One CBDRM implementer summarized their sentiment regarding the complex relationship between CBDRM and politics in two sentences: “And sometimes [politics] helps you, sometimes it crushes you. And not only the politics that people elected [...], but also community politics”. This statement highlights the political context in which local actors work, forced to navigate the complex field between local poverty and inequality, trying to simultaneously meet the funding targets and local priorities within the political realities (Jones, 2009; Zanotti et al., 2015).

### **5.3.2 Trust and politics**

A correlation between trust and politics was highlighted by numerous interviewees (9), expressing challenges in gaining trust due to political factors. Various community members in both FGDs highlighted perceived transparency issues, a lack of good communication, and power differences as hindering them from voicing their needs to higher authority levels. Khankeh et al. (2023) identify similar reasons for undermining trust in authorities, for instance the gap between public expectations and capacities, misbehavior of government officials, and pre-disaster uncertainties. Despite the highlighted challenges, the majority of community members specifically expressed a positive relationship with their community leaders and LGUs, which in their opinion led to increased participation and trust. This underlines the perception stated in the literature, that local authorities are seen through a different lens than national authorities, offering pathways for attaining higher trust levels through aligning actions with communities’ needs (Fornalé et al., 2023; Zubir & Amirrol, 2011). In this context, one duty-bearer pointed out the necessity of having a good leader for trust:

Trust is dependent on the actions of the leader [...], if you are a good leader, then someone will follow you. [...] But if not [...] they will just do it for the sake of the law, but trusting is the issue. (Duty-bearer)

This aligns with findings of Fornalé et al. (2023) describing trust as embedded in power relationships that determine levels of trust based on actors' dependencies and available alternatives - only following leaders for the sake of the law suggests lacking alternatives due to the power relationships between voted officials and citizens. This dependence of the CBDRM success on trust towards the leaders and duty-bearers was furthermore attributed to the fact that the LGU frequently assumes the responsibility for finances and policies after project completion.

Challenges for NGOs as implementers in building trust between the LGU and community were also mentioned by the CBDRM implementers, with LGUs needing to trust them to be able to access the communities, while NGOs simultaneously have to assert their independence from politics to gain community trust in the face of low trust in political institutions. Red-tagging of NGOs was highlighted by two implementers as another challenge for gaining trust from both communities and duty-bearers, defined by the International Peace Observers Network (2011) as: "an act of State actors, particularly law enforcement agencies, to publicly brand individuals, groups, or institutions as... affiliated to communist or leftist terrorists". This practice, described by the United Nations as a human rights issue, threatens and potentially abuses various fundamental rights, and poses various challenges for NGOs in their DRM roles (Tugade, 2022; United Nations Human Rights Council, 2020). Therefore, the two CBDRM implementers stated that they prioritize the transparency of objectives and their independence from politics to gain the necessary trust of communities and duty-bearers.

#### **5.4 Trust**

Initially, interviewees were asked to identify factors influencing the success and sustainability of CBDRM, with only a handful of respondents immediately mentioning trust as a factor. However, during the interviews, trust emerged as a key theme by every respondent, independently from specific questions on trust. The interviewees were asked to define trust in their own words, revealing diverse perspectives with an emphasis on unity, the attitude of others, respect, the necessity of acting on words, and vice versa trust.

#### 5.4.1 Definition of trust

More than half of the community members highlighted the close connection between trust and love, emphasizing that trust often stems from mutual relationships. Some also pointed out a connection between respect and love. Trust was furthermore linked to a sense of safety and protection. Moreover, interviewees emphasized the need for displaying a trustworthy attitude through sincerity and fulfilling commitments, often referred to as “walking the talk”. Similarly, scholars like Paul et al. (2016, p.124) underline the role of relationships as a prerequisite for trust, facilitating cooperation, and define trust as the confidence in others’ reliability to act on their commitments and as related to an individual’s characteristics and setting. This is relevant for understanding the role of trust in CBDRM approaches, with implementers’ trust being influenced by their settings as representatives of organizations and their characteristics.

Two interviewees highlighted that trust is easily given but hard to regain, aligning with the asymmetry principle described by Ter Huurne and Gutteling (2009), stating differences in the way that trust and distrust are created or maintained. However, Ter Huurne and Gutteling (2009) state the opposite regarding how trust is gained, which most interviewees stated as ‘easily given’, while they refer to it as hard to create but easily destroyed. This difference could be due to various reasons, such as the culturally strong existence of in-group cohesion as Lee (2019) described for East Asia, however, this is considered to potentially inhibit the formation of out-group trust, raising questions on what type of trust (horizontal or vertical) the community members were referring to. Or it could be due to the individual risk perception, also possibly related to gender and age, since those two interviewees were men, who are statistically considered to have a lower risk perception and faster to trust, compared to women or younger people who show higher risk perception (Siegrist et al., 2005).

The importance of unity within a group for building trust was emphasized and a positive relationship between trust and participation, as described before, was highlighted by numerous interviewees (6 & 1 FGD). One duty bearer summarized this as: “the trust and confidence of the community to the implementers is critical in mobilizing the activist communities to prepare for the impacts of natural hazards such as flooding”. Overall, the definitions provided by the interviewees align with existing research, indicating that social trust is shaped by the cultural context and values of a society (Khankeh et al., 2023; Siegrist et al., 2005). Consequently, trust is viewed as a multidimensional construct influenced by various

factors like knowledge and openness of the individual within the economic and contextual system (Khankeh et al., 2023; Siegrist et al., 2005). Both the importance of horizontal trust within the community and vertical trust towards the implementers was highlighted.

#### **5.4.2 Horizontal Trust**

Both communities highlighted a strong sense of horizontal trust within their community in the FGDs, which they attributed to their culturally strong family and community ties and Bayanihan. They described not needing to lock their doors at nights due to this high level of inter-community trust, which was highlighted as crucial for enabling collective community actions like CBDRM. Khankeh et al. (2023) found a correlation between areas with frequent disasters and higher rates of social trust toward neighbors, which would fit with the communities interviewed. Xue et al. (2021) identify benefits and risks of these high levels of interpersonal trust, which potentially provides emotional support and increases self-efficacy, but might reduce the risk perception of disaster threat. This may partly explain why some interviewees are *accustomed* to the floods, not perceiving them as a threat and do not evacuate, though the other discussed factors impacting this evacuation should not be underestimated.

Discussions within the communities highlighted the importance of considering existing trust and power dynamics related to Purok and community leaders since high levels of trust towards them were considered to facilitate committed participation. Similarly, Peng et al. (2020) describe interpersonal trust as a driver of CBDRM, since trust in peers and community leaders may promote inter-community collaboration and cooperation and Aldrich and Meyer (2014) note that communities with high trust and strong networks recovered faster from disasters, as neighbors and informal ties often serve as first responders. Consequently, interviewees suggested involving trusted Purok leaders to enhance trust with implementers, echoed by Bernados and Ocampo (2023) who describe Puroks as symbols of community trust. However, existing tensions among community leaders, Puroks, and community members were mentioned as posing challenges to horizontal trust and possibly impacting vertical trust.

#### **5.4.3 Vertical Trust**

The interviewees were asked to identify factors that influence the trust of communities towards implementers and the duty-bearers and vice versa. In this research, the focus for vertical trust includes the duty-bearers and implementers since they closely collaborate with

the community, but are considered outsiders. All CBDRM implementers emphasized the critical necessity of vertical trust, especially for local NGOs implementing projects that are funded by international donors:

I think that's [vertical trust] critical, particularly for a local non-government organization like us, because we are an outsider. We're implementing a project funded by an international aid agency. We have to establish the trust first between the duty-bearers, the communities, before we implement the project intervention. (CBDRM implementer)

Furthermore, the interviewees highlighted that vertical trust is essential for the overall project success, which aligns with the literature, stating how trust in institutions influences the residents' view on the acceptability of the project and their willingness to commit time and resources (Nunkoo & Ramkissoon, 2012). However, it is noteworthy that one duty-bearer noted that not all organizations they had worked with had prioritized trust building.

#### ***The trust of communities towards implementers (and local government)***

Several factors that influence the level of trust placed in implementers by community members were mentioned by interviewees. Both the community members and the implementers were asked for their perspectives on this topic.

The community members highlighted the importance of implementers' personal characteristics, such as their sincerity, honesty, and approachability. They also valued seeing implementers invest their best effort into the project, and into understanding the community's culture. Furthermore, the inclusiveness of the project was pointed out as influencing trust, linking back to the themes of accessibility and inclusivity. Fornalé et al. (2023) and Ter Huurne and Gutteling (2009) identified similar factors contributing to institutional trust, such as the ability to show care, openness, honesty, and commitment to resolving risks. Additionally they identified the perceived legitimacy, their ability and competence (Fornalé et al., 2023; Ter Huurne & Gutteling, 2009). Notably, neither the community members nor the CBDRM implementers mentioned the need for technical competence to gain trust. This could be due to various reasons: an assumption that implementers automatically possess technical expertise or that the perceived effort and personal qualities were more crucial. However, in some interviews, technical skills were understood as implied when discussing capacity development. This finding aligns with Hagelsteen and Becker (2013), who discuss internal/external partnerships for capacity development and found that more than half of the

informants emphasized soft skills, such as trust-building and sensitivity, with no one highlighting technical skills. They back this up with other studies, indicating that emotional intelligence is more important, up to twice as much, as technical knowledge (Hagelsteen & Becker, 2013).

When asked about how past experiences with implementing organizations would affect their trust towards new implementers, some community members believed that negative experiences would negatively impact trust, which aligns with findings by Fornalé et al. (2023), reflecting that trust is often shaped by historical experiences of oppression of privilege. Other community members indicated that their trust was solely dependent on the actions of the new implementers, which could for instance be due to lower levels of risk perception, as described by Siegrist et al. (2005), or that they have not had negative experiences yet. Additionally, community members in both FGDs emphasized the significance of offering food during activities to gain trust, describing food as their cultural “love language”. This aligns with cultural norms in the Philippines, where sharing food is considered a form of socialization and a sign of good upbringing (Pacquiao, 2008). It is noteworthy that several community members related their trust to a perceived *need* to trust implementers due to desperation for solutions to the recurring floods. This raises questions about the nature of this trust if the alternatives are limited. Researchers discuss similar issues, how power relationships can influence trust, and connect the possibility of trust to the degree of mutual dependence and the nature of alternatives available to the parties (Fornalé et al., 2023; Hagelsteen & Burke, 2016).

The implementers also shared insights into what impacts the communities’ trust towards them, emphasizing similar aspects to the community, such as commitment, following through on promises, and acknowledging past experiences. Every CBDRM implementer stressed the importance of adapting CBDRM processes to each community’s context, needs, and capacities to gain their trust. To achieve this, it was suggested to conduct a background study before working with the community, also offering the possibility of identifying existing power structures. Inclusive approaches, in particular engaging minorities and PWD were also highlighted as essential to understanding their needs and capacities, but also as a challenge. The scholars Fornalé et al. (2023) highlight similar challenges of operationalizing trust across social groups and institutions related to systemic inequalities such as gender, ethnicity, and class.



Furthermore, power disparities were found to contribute to distrust, making it reasonable to assume that more powerful residents have higher trust in institutions/implementers compared to less powerful ones (Nunkoo & Ramkissoon, 2012). All CBDRM implementers acknowledged the difficulty of building trust - especially if the communities had negative previous experiences - under the time pressure and financial constraints they often have and related to dual accountabilities to their donors. Literature reflects this complexity and underscores the necessity of a favorable environment that balances biases and experiences to foster trust-building, as described in the conceptual framework of this research (Bernados & Ocampo, 2023; Fornalé et al., 2023). Overall, there was a consensus that transparency, accountability, and an alignment of actions with intentions were identified as the main factors influencing the community's trust towards implementers.

### ***The trust of implementers towards communities***

There was a consensus among the CBDRM implementers, that next to the communities' trusting them as implementers, they also needed to trust the communities. One called it unfair if there was less trust towards the community: "I think it's really unfair if the implementing agency for CBDRM would have distrust to the community because that would delimit the activities [...], they would certainly fail".

Several interviewees highlighted the need to understand the conditions of the community in relation to their participation, and the need to trust that there are pre-existing capacities to develop and build upon. Literature on local ownership in capacity development underscores the significance of external partners in supporting the internal partner according to their specific needs, acknowledging existing capacities and thus allowing them to take ownership of the process (Hagelsteen & Becker, 2013). One CBDRM implementer also emphasized the need for a positive outlook on the world when working with communities, believing that negativity about the goodness and willingness of people would hinder community work. Researchers such as Hagelsteen and Burke (2016) also warn of the risk of external partners perceiving themselves as trustworthy and committed while the internal partners are perceived as uncommitted and unreliable, which they link to power issues, potentially straining the partnerships and project sustainability. Similarly, two implementers discussed the importance of self-reflection before setting expectations for the communities but also highlighted the positive experiences they had working with communities if mutual respect and trust-building were prioritized. One implementer summarized the optimal

relationship between the CBDRM implementers and the communities as follows: “We respect their time, they respect our time, they respect the project”. Here it is noteworthy, that this specific implementer used the words trust and respect interchangeably and pointed out a connection between these words - thus, it is fair to assume that this implementer also meant trust when saying respect.

The literature search for this thesis did not identify any articles discussing the specific topic of *trust of the implementers towards the community*. However, it could be argued that broader discussions in literature on dual accountabilities and power dynamics in development aid highlight similar challenges related to trust and local ownership as discussed here. Several researchers write about the dangers of dual accountability and mistrust of partners’ capacities, such as bureaucratic structures that emphasize control and oversight, which reinforce traditional top-down approaches and hinder local ownership (Hagelsteen & Becker, 2013; Hagelsteen et al., 2022; Pouligny, 2009; Zanotti et al., 2015).

## **5.5 Success and Sustainability of CBDRM and the role of trust**

Since the main research question of this thesis was to explore the role trust plays in achieving sustainable CBDRM, this section places trust within the overall context. As seen before, a variety of factors influencing the outcome of CBDRM processes were highlighted by the interviewees, summarized into the categories of

- 1) awareness, information and knowledge
- 2) meaningful participation in the cultural context
- 3) frameworks, politics and power; and
- 4) trust.

Several factors next to trust emerged as crucial for sustainable CBDRM, for instance the need for unity and partnership within the community and with the implementing organization, which is however closely related to trust. Long-term commitment and willingness from both sides were emphasized, linked to active and meaningful participation in CBDRM activities. Interviewees highlighted the importance of awareness of vulnerabilities and risks, which is connected to the existing information and knowledge, and if this information is trusted, as influencing their participation in CBDRM activities.

There was consensus on the importance of participation in sustainable CBDRM, emphasizing that it must be in-depth, accessible, inclusive, and multisectoral to be meaningful.

It was highlighted that true local ownership and empowerment could only be achieved if vulnerable groups were included in the decision-making processes of CBDRM and if pre-existing capacities and Indigenous Knowledge were acknowledged. Taking all these aspects into account was considered to support the trust-building process between implementers and the community.

Furthermore, stable frameworks and policies were highlighted as crucial for standardizing and guiding implementers in their work, addressing the challenges of political turnover. Additionally, issues related to power disparities and trust challenges in the political climate were included, also regarding short project timelines and a need for more stable finances to achieve sustainability in CBDRM.

Several studies highlight similar challenges in achieving sustainable CBDRM as pointed out in the interviews, noting failed long-term sustainability of projects and stating key factors for enhancing the sustainability. Most often mentioned were participation, partnerships, empowerment, ownership, and contextually adapted. It is noteworthy, that out of eleven studies focusing on the sustainability of community approaches such as CBDRM or CR, only five explicitly mentioned trust as a key factor (see Bernados & Ocampo, 2023; Bonfanti et al., 2023; Khankeh et al., 2023; Paton, 2007; Peng et al., 2020). However, several highlight social capital or the importance of stable partnerships and relationships, therefore implying the importance of trust (see Aldrich & Meyer, 2014; Fernandez et al., 2012; Lee, 2019; Mathbor, 2007; Pandey et al., 2012; Victoria, 2003). While Bernados and Ocampo (2023) do indeed highlight the importance of trust, and social capital in their article, they caution that it cannot replace financial resources, which is consistent with the findings of this research. Furthermore, Peng et al. (2020) suggest that social trust in CBDRM may be mediated by place attachment, thus is not straightforward. While the interviewees in this research were questioned on their level of place attachment, a specific mediating role on trust was not identified, showing the need for further research on this aspect. Furthermore, various studies on CBDRM in Asia underline the advantages of the existing coping culture and also stress the inclusion of vulnerable groups mentioned in the interviews (Fernandez et al., 2012; Pandey et al., 2012; Victoria, 2003).

Overall, the role of trust in achieving sustainable community-based disaster risk management was considered substantial. Most community members believed that higher levels of trust correlated with increased long-term participation and commitment, which could

promote better outcomes and enhanced sustainability of CBDRM approaches. Conversely, distrust or a lack of trust were considered to lead to unsuccessful programs.

One duty-bearer summarized the role of trust as follows:

But if you do programs with trust, people tend to be more participative in the sense that because we trust this organization, the people in the society might contribute. [...] The community itself could give back, you are giving something to our community, here is our share for you to continue that project [...] What I am saying right now is that if you establish the trust, this project or program might be sustainable. (Duty-bearer)

This quote highlights the significant role of trust in achieving sustainable outcomes in CBDRM and the overall goal of CR. Also, research underscores the intrinsic relationship between trust and CR, with for instance Khankeh et al. (2023) emphasizing the need for trust, relationships, and participation as the critical components for CR or Bonfanti et al. (2023) stating the role of trust as a direct predictor of resilience, specifically during disasters. This is mirrored by various researchers, stating the positive influence of trust on the recovery time and social capitals' role in making community life more sustainable and resilient (Aldrich & Meyer, 2014; Lee, 2019; Mathbor, 2007). However, studies also emphasize the importance of contextualizing trust levels, particularly concerning governance structures that influence access to resources, which has the risk of becoming a self-reinforcing cycle eroding trust (Bonfanti et al., 2023).

## **5.6 The adapted conceptual framework**

Based on the results and discussion presented above, the conceptual framework created in chapter 3.3 is adapted accordingly (see figure 14). The significant influence of cultural factors should be noted here, demonstrating the context-dependency of the role of trust and CBDRM generally. This adapted framework does not claim to be holistic and reflects the notion that: "All models are wrong, some are useful" (Box, 1976, p.792). Therefore, this adapted framework should be understood as a visual representation of relationships between the themes as highlighted by the interviewees. Although the focus was on trust, rather than social capital, the communities' definitions of trust are interpreted as related to social capital, and this visualization of social trust as the core of social capital is maintained. The main adaptations of this new framework are the addition of the enabling environment, and changes in what is considered to influence participation. The enabling environment was divided into

*national and local politics, and policies and frameworks* and was placed as a *bubble* surrounding and influencing the whole process.

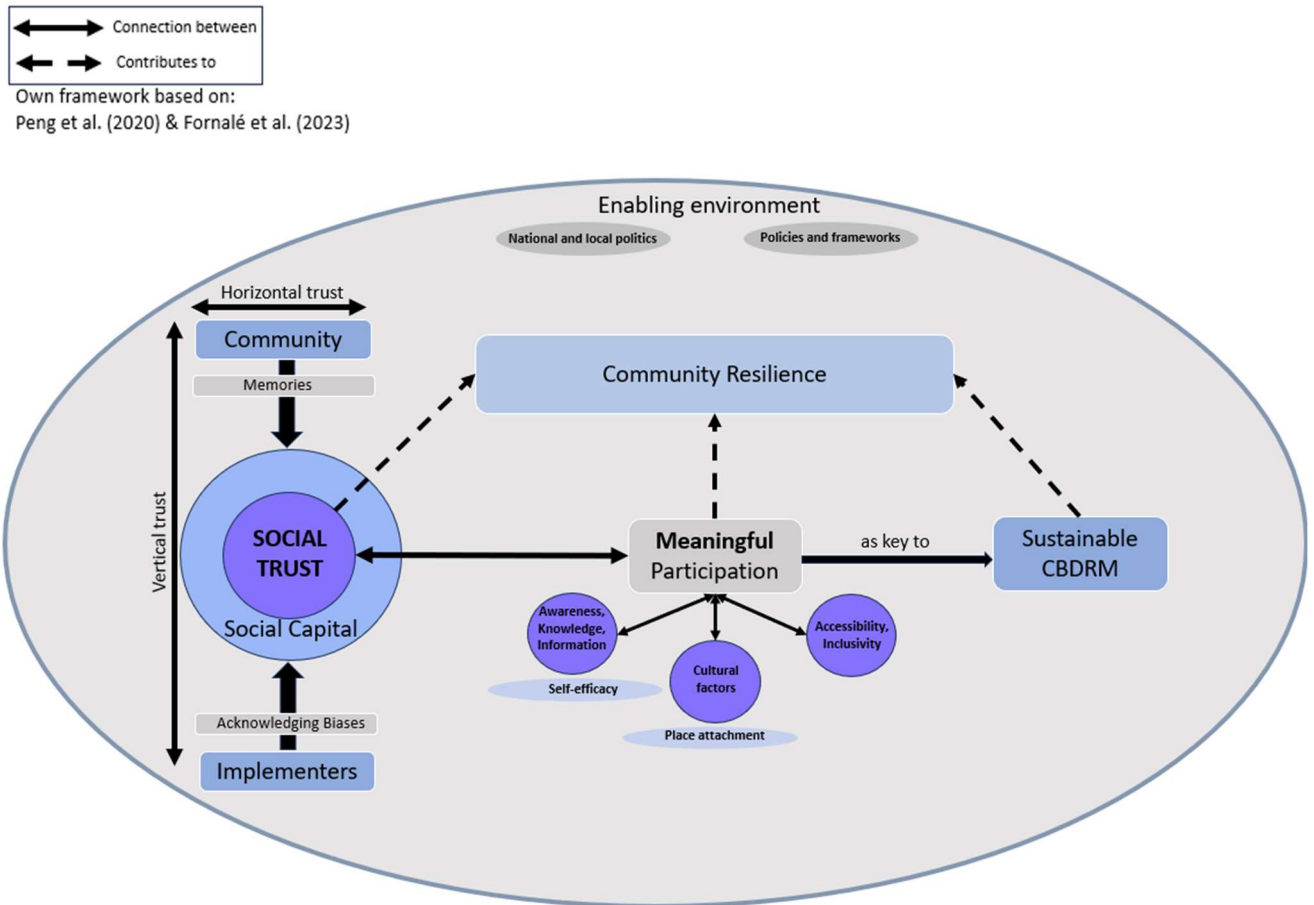


Figure 14: Adapted conceptual framework according to research findings based on Fornalé et al. (2023) and Peng et al. (2020)

Since various interviewees highlighted the need for participation to be meaningful and related various factors influential on participation, this framework uses the term *meaningful participation* and divides its driving factors according to the themes discussed before: awareness, knowledge, information; cultural factors and accessibility, inclusivity and trust. Again, these categories are based on the researcher’s interpretations and not holistic. Since this research did not focus on the role of self-efficacy and place attachment specifically, these are represented as sub-categories of others. Bidirectional arrows represent the complexity of the nonlinear relationships. Similarly, to what Fornalé et al. (2023) note, the role of trust in CBDRM is neither the center nor the final output but should be seen as a process in itself, related to past memories, cultural aspects, and biases from both implementers and communities. This framework shows the complexity of the topic, making a clear statement of the role of trust in CBDRM difficult, while simultaneously pointing out the central role it plays in the sustainability of CBDRM processes.

## **5.7 Generalizability and limitations of the study**

This research provides insights into the importance of a trust relationship for sustainable CBDRM. However, it is important to understand the generalizability and limitations of this research (see also Chapter 2.3). As noted in the literature and reflected upon by the interviewees, trust is inherently contextual and shaped by various sociocultural, environmental, political, and economic factors (Khankeh et al., 2023; Nunkoo & Ramkissoon, 2012). Furthermore, this study focused on trust as a part of social capital, not on social capital specifically. However, as a close link has been previously noted in the literature (Lee, 2019), trust has been placed in the context of social capital. However, further research focusing on trust in the context of social capital would be needed for the Filipino CBDRM field. This study focuses on four specific communities, limiting the geographical scope of the conclusions. Therefore, the trust dynamics observed within the communities in the Pangasinan region may differ even from other Filipino regions. Thus, while this study provides in-depth insights specific to this context, caution should be exercised in extrapolating these conclusions. However, some findings, such as the importance of the implementers trusting the community in CBDRM and the literature gap on this topic, demonstrate the relevance of this research and highlight the need for further research on two-way trust and trust in CBDRM generally.

As highlighted in the methodological limitations, the chosen methodology with a small sample size, while allowing for in-depth insights, may not provide a complete picture of the diversity of views and practices within the communities or other regions (Basnet, 2018). However, this study aimed to include diverse interviewees and attempted to capture as many views as possible within this limited research scope. Furthermore, the researchers' differing cultural and social background poses limitations (Stewart-Withers et al., 2014). Still, as many community members and interviewees knew the researcher from a previous internship, it can be argued that a certain level of trust was already established, further strengthened by the cooperation with CDP.

Overall, trust relationships should be understood as multifaceted and subject to change over time. Therefore, this research only captures a snapshot of the trust dynamics within a specific context and time, and should not be seen as a holistic picture, as it can not fully capture the dynamic nature of trust-building processes in CBDRM.

## 6. Conclusion

This research explored the role of trust in achieving sustainable CBDRM using the case of the communities Pangapisan North, Malued, Angatel, and Mabalbalino in the Pangasinan region of the Philippines. Fundamentally, an interactive relationship between trust and all other factors for sustainable CBDRM could be identified, pointing out the role of trust as one of the cornerstones for sustainable CBDRM. By conducting two FGDs and 15 semi-structured KIIs, this research gained in-depth insights into the perspectives of community members, duty-bearers, and CBDRM implementers on the current trust landscape and its perceived importance for the context of the Filipino communities.

The main research question, exploring the role of trust in sustainable CBDRM shows it is underpinned by the continuous and meaningful participation of the community, which in turn is strongly influenced by the level of trust that community members have in the process and the implementers and leaders. This trust is multifaceted and includes both horizontal and vertical trust, i.e., among community members on the one hand and toward duty-bearers and CBDRM implementers on the other. While horizontal trust was seen as fostering an environment that facilitates collaboration, vertical trust ensures that community members feel heard and confident about the intentions and capabilities of the CBDRM implementers. Therefore, this research found a correlation between trust and the extent to which community members are willing to participate and invest in the overall CBDRM effort, even beyond the lifespan of projects. This is considered critical to the sustainability.

The first sub-question aimed to explore which factors next to trust influence the sustainability of CBDRM efforts. Various factors were identified, starting with existing awareness, available information and knowledge about vulnerability to hazards, the need for meaningful participation adapted to the local context, and an enabling environment in terms of policies and frameworks. All of this seemed to be linked to some extent to the political climate at both regional and national levels.

The second sub-question focused on factors that influence the participation of community members - participation was identified as a key, and thus another cornerstone of sustainable CBDRM. The community's awareness and knowledge of their vulnerabilities were considered relevant, as was their perceived self-efficacy and knowledge of actions to change outcomes. Accessibility and inclusivity, and the need to adapt the activities according to the cultural context, were highlighted as factors influencing who participates. For the Filipino

community context, planning activities according to the time scale of livelihoods and providing food were mentioned. Furthermore, the research highlighted that trust relationships between CBDRM implementers, community leaders, and the community can lead to a significant increase in community involvement and participation.

In addition, answering the last sub-question, the interviewees highlighted various challenges for trust-building and recommendations for addressing them. These challenges were attributed to various factors, such as political complexity, and possible negative experiences with previous implementing organizations. To address these challenges, both CBDRM implementers and community members mentioned the importance of transparency and the need to develop in-depth relationships with the community. Furthermore, the need for inclusivity and multi-sectoral representation was highlighted and the implementers advocated for stricter implementation of existing policies that strengthen good governance, accountability, and sustainability.

The majority of the findings align with existing literature, however, gaps especially concerning the implementer toward community trust and the Filipino context could be identified. Furthermore, some findings of previous literature, such as the strong influence of place attachment and self-efficacy (Peng et al., 2020) could only be partly reflected by this research, showing the need for further research. Additionally, the limited scope of this study related to the context-dependency of CBDRM points out the need for a more holistic understanding of the role of trust and how it interacts with other factors in this complex world, making research on other contexts crucial. However, parts of these findings may apply to other communities and regions with similar CBDRM practices, geographical and cultural conditions - if the individual experiences and potential biases of the communities are considered.

In conclusion, the role of trust in the context of the Philippines, particularly in the disaster-prone region of Pangasinan, has emerged as a significant influence on the success and especially the sustainability of CBDRM. Thus, to achieve the overall aim of CR, trust as the core of social capital and its impact on participation, should not be forgotten in the planning and conducting of CBDRM.



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# Annex

## Annex 1: Guiding Questions for Community Members

**Icebreaker: potentially dance (was always done at workshops)**

**Introduction (10 min):**

- Can you please tell me about yourself? (Age, Gender)
- What is your role in the community?
- What is your experience with CBDRM?

Short part about defining the key concepts that will be used: CBDRM and Social Trust

### **1. Factors for successful CBDRM (10 min)**

What factors influence the success and sustainability of community-based disaster risk management approaches in your opinion?

Probes depending on what is mentioned:

- Participation
- Trust
- Motivation
- Reliable Implementers
- Local ownership

### **2. Factors for Participation in CBDRM approaches (community social capital) (15 min)**

Participation is considered to be a key for community-based disaster risk management - what factors influence if you personally would participate in events organized by the CBDRM implementers?

Probes depending on what is mentioned before:

- Trust in other community members?
- Trust in the implementers?
- Place attachment?
- Thinking you can even change anything (self-efficacy?), decision-making power
- Risk perception?
- Thinking your voice is heard?
- Past experiences
- Cultural appropriateness (e.g., meeting time)
- Socio demographic factors (gender, age, wealth, health)?

### **3. Definition of Trust and Importance of Trust from Perspective of Community (30 min)**

How would you personally define "trust"?

What role would you say, does trust play in achieving sustainable CBDRM?

Probes:

- What influences your trust in someone?
  - In fellow community members
  - In implementing organizations / individuals?
- Trust between whom is relevant?
  - Between community members?
  - Between community and implementer?

### **Horizontal / Interpersonal trust within the Community**

In what way does trust within a community influence if people participate or do not participate in CBDRM activities?

And in what way influences trust within a community if those activities are sustainable and successful?

### **Vertical / Institutional trust between Implementers and Community**

In what way does trust of community members in the implementers of CBDRM activities influence if people participate or do not participate in CBDRM activities?

And the other way around - the trust of implementers in the community members?

And in what way influences the trust between community members and influences if those activities are sustainable and successful?

Probes:

- What influences your trust in implementers? And of the implementers in the community?
  - Having a history with them?
  - Hearing they are trustworthy?
  - The work they do?
  - Their origin (Filipino or international)?

### **4. Challenges related to Trust (15 min)**

What challenges regarding the aspect of trust come to your mind when thinking about CBDRM?

Do you have any suggestions of what would improve the trust relationship, both from a community perspective and implementers perspective?

Probes:

- Do you think it helps if they know the context?
- Do you think it helps if the implementers are from the region itself?

### **Ending Questions:**

- Is there anything else that was not touched upon before that you would like to add?
- Is there anything else you think I should consider / know to understand this topic better?
- Are there any concerns regarding the Interview/Discussion and topic?
- Do you have any further questions for me?

## Annex 2: Guiding Questions for Key Informants

### Introduction (5 min):

- Can you please tell me about yourself (Age, gender)?
- What is your experience with CBDRM?

Short part about defining the key concepts that will be used: CBDRM and Social Trust

### 1. Factors for successful CBDRM (5min)

What factors influence the success and sustainability of community-based disaster risk management approaches in your opinion?

What do you think is most important of the factors you mentioned? And why?

Probes depending on what is mentioned:

- Participation
- Trust
- Motivation
- Reliable Implementers
- Local ownership

### 2. Factors for Participation in CBDRM approaches (community social capital) (10 min)

In literature, participation was mentioned as the key for community-based disaster risk management, do you agree with this statement?

What influences if a community member participates in events organized by the CBDRM implementers (*refer back to most important factors mentioned above*)?

Probes depending on what is mentioned:

- Community social capital?
  - Place attachment?
  - Thinking you can even change anything (self-efficacy?)
  - Thinking your voice is heard?
- Social Trust?
  - Trust in community members?
  - Trust in the implementers?
- Past experiences?
- Risk perception?
- Biases from the implementers? (e.g. trustworthiness, capacities etc. of community)
- Cultural appropriateness (e.g., meeting time)
- Socio demographic factors (gender, age, wealth, health)?

### 3. Definition of Trust and Importance of Trust (30 min)

How would you personally define “trust”?

What role would you say, does trust play in achieving sustainable CBDRM?

Probes:

- What influences your trust in someone?
- Trust between whom is relevant?
  - Between community members?
  - Between community and implementer?
  - Trust of implementer in the capacities of the community?

### **Horizontal / Interpersonal trust within the Community**

Do you think trust within the community is an important factor that influences if people participate or do not participate in CBDRM activities?  
And if those activities are sustainable and successful?

### **Vertical / Institutional trust between Implementers and Community**

Do you think trust in the implementers of CBDRM activities is an important factor that influences if people participate or do not participate in CBDRM activities?  
And the other way around - the trust of implementers in the community members?  
And if those activities are sustainable and successful?

Probes:

- What do you think influences the trust in implementers and of implementers in the community?
  - Having a history with the community
  - Good reputation
  - How well they perform
  - The origin (Filipino or international)

### **4. Challenges related to Trust (10 min)**

What challenges related to trust come to your mind when thinking about CBDRM?  
Do you have any suggestions of what would improve the trust relationship, both from a community perspective and implementers perspective?  
Do you think all of the CBDRM approaches that are conducted give priority to trust establishment?

Probes:

- Do you think it helps if implementers know the context?
- Do you think it helps if the implementers are from the region itself?

### **Ending Questions:**

- Is there anything else that was not touched upon before that you would like to add?
- Is there anything else you think I should consider / know to understand this topic better?
- Do you have any suggestions on who else could give good input on this topic?
- Are there any concerns regarding the Interview/Discussion and topic?
- Do you have any further questions for me?

### Annex 3: Concepts to explain before Interviews

#### CBDRM

“inclusive, active and owned community driven process aimed at addressing the drivers of disaster risk creation, disaster risk reduction and societal resilience building within the context of local and indigenous knowledge and wisdom” (Van Niekerk et al., 2017)

Two categories of stakeholders: insiders & outsiders

CBDRM follows series of similar steps: building relationship & trust with community, participatory risk assessment, planning, implementing disaster risk management committee

Principles & qualities of CBDRM programs: **participatory, responsive, multidisciplinary, empowering and developmental**

**mediator between giving the community a greater role in disaster risk management while acknowledging the importance of also including scientific risk assessments and planning, thus promoting a harmony between bottom-up and top-down approaches**

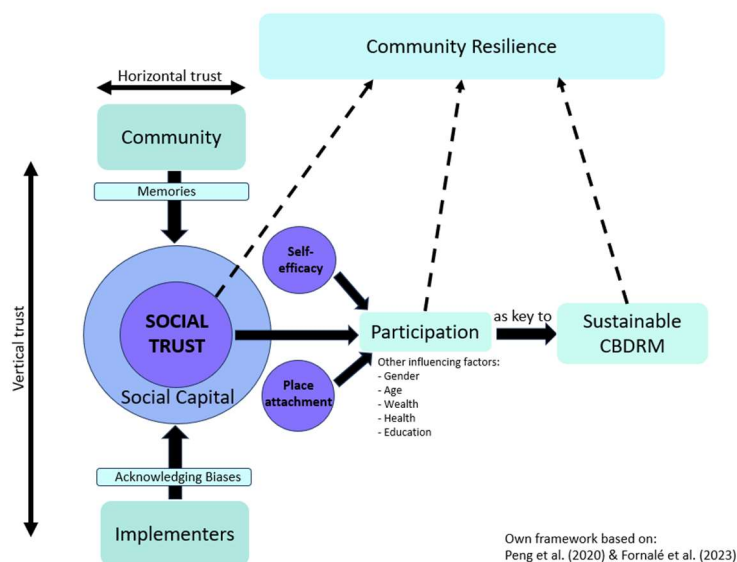
In reality the approaches often have shortcomings, meaning that even though projects are based in communities, they tend to be run and implemented fully by external actors, leading to dependencies and difficulties, e.g. in terms of trust and participation

#### Trust

“belief that most people and management institutions are generally reliable and honest” (Peng et al., 2020)

divide social trust into two dimensions, horizontal trust (i.e., interpersonal trust, expectation that other people are trustworthy, e.g. kin, friends, neighbors) and vertical trust (i.e., institutional trust, trustworthiness of e.g., local government or authority)

#### Conceptual Framework



## **Annex 4: Consent Form (English)**

Information about Participation in Thesis Research from Lund University

### **1. Information about the research**

I, Annika Burkhardt, am a master student at the Faculty of Engineering at Lund University currently doing my master thesis on the topic of the role of trust in achieving sustainable community-based disaster risk management.

I am very interested to learn more about your communities experience and take on this topic.

Therefore, I invite you to participate in a Focus Group Discussion / Interview to share your knowledge and experience.

The research conducted is independent. However, the Center for Disaster Preparedness is providing support with logistics and transportation - therefore the results will be shared with CDP. Also, the Swedish Institute for Local Democracy, ICLD provided funds for conducting this fieldwork and will receive the thesis in the end. Furthermore, since this research is for a master thesis, the results will be openly available from the University website.

### **2. Participation is voluntary**

The participation in the Focus Groups and Interviews is voluntary and you do not have to answer any question if you do not want to.

Also, if at any time, during or after the discussion or interview you do not want to participate anymore, you are free to withdraw without any consequences and answers you have already given will not be used anymore.

During the focus group discussion and interview notes will be taken and the meeting will be recorded. Furthermore, potentially pictures will be taken.

### **5. How your personal information will be used**

The information shared will be used and analyzed by the help of software for the purpose of research, and will be included in the master thesis that will be published at Lund University.

The presentation of the data acquired will be presented without using your personal information, such as your name or other identifying information.

All audio recordings will be deleted after the end of the research process.

You can always request for the information that you provided to be deleted or excluded from the study - if that is the case contact me via the contact details provided below.

You will be able to see the results of the study by downloading the finished thesis from [https://drive.google.com/drive/folders/14ngBqoy8VFIzmdFr-ymB5zbyu\\_eCICNm?usp=drive\\_link](https://drive.google.com/drive/folders/14ngBqoy8VFIzmdFr-ymB5zbyu_eCICNm?usp=drive_link) later in 2024.

## Consent to Participating in the Thesis Research

I have read and understood the information about the study in the above text. I have been given the opportunity to ask questions and I have had them answered. I may keep the written information.

- I consent to participating in the research described in this document, including being recorded.
- I agree to the use of my photos being taken and published.
- I consent to the use of my personal data as described in this document.

.....  
Place and date

.....  
Signature and name

If you have any questions, please don't hesitate to contact me:

Annika Burkhardt (an8061bu-s@student.lu.se)

If you need to contact my supervisor: Mo Hamza, mo.hamza@risk.lth.se

## **Annex 5: Consent Form (Tagalog) Pahintulot sa Pakikilahok sa Pananaliksik ng Thesis**

Impormasyon tungkol sa Pakikilahok sa Pananaliksik mula sa Lund University

### **1. Impormasyon tungkol sa pananaliksik**

Ako ay isang mag-aaral sa master sa Faculty of Engineering sa Lund University na kasalukuyang nagtatapos ng aking master thesis sa paksa ng Ang Papel ng pagtitiwala sa pagtatagumpay ng pagsasagawa ng sustainable community-based disaster risk management.

Ako ay lubos na interesadong matuto pa tungkol sa karanasan at pananaw ng inyong komunidad sa paksa na ito.

Kaya naman, inaanyayahan ko kayong lumahok sa isang Focus Group Discussion/Interview upang ibahagi ang inyong kaalaman at karanasan.

Ang pananaliksik na isinasagawa ay independiyente. Gayunpaman, ang Center for Disaster Preparedness ay nagbibigay ng suporta sa logistics at transportasyon - kaya't ang mga resulta ay ibabahagi sa CDP. Gayundin, ang Swedish Institute for Local Democracy, ICLD ay nagbigay ng pondo para sa pagpapatupad ng pananaliksik sa larangan na ito at tatanggapin ang tesis sa wakas. Bukod dito, dahil ang pananaliksik na ito ay para sa isang master thesis, ang mga resulta ay magiging bukas at makukuha sa website ng Unibersidad.

### **2. Ang pakikilahok ay boluntaryo**

Ang pakikilahok sa Focus Groups at Interviews ay boluntaryo at hindi ninyo kailangang sagutin ang anumang tanong kung hindi ninyo nais sagutin.

Gayundin, kung sa anumang oras, sa panahon o pagkatapos ng diskusyon o interbyu ay hindi ninyo nais pang lumahok, malaya kayong umayaw nang walang anumang kahihinatnan at ang mga sagot na inyong ibinigay ay hindi na gagamitin pa.

Sa panahon ng focus group discussion at interview, magkakaroon ng mga pagtatala (notes) at ang pulong ay magiging naka-rekord. Bukod dito, maaaring kumuha ng mga larawan.

### **3. Paano gagamitin ang inyong personal na impormasyon**

Ang impormasyong ibinahagi ay gagamitin at aanalyzahan sa tulong ng software para sa layunin ng pananaliksik, at isasama ito sa master thesis na ilalathala sa Lund University.

Ang presentasyon ng nakalap na datos ay ipapakita nang hindi gumagamit ng inyong personal na impormasyon, tulad ng inyong pangalan o iba pang impormasyon na nakakakilala sa inyo.

Lahat ng audio recordings ay buburahin pagtatapos ng proseso ng pananaliksik.

Maaari kayong humiling na ang impormasyong ibinigay ninyo ay burahin o alisin sa pag-aaral - kung gayon, makipag-ugnayan sa akin sa pamamagitan ng mga detalye ng contact na nakalagay sa ibaba.

Makikita ninyo ang mga resulta ng pag-aaral sa pamamagitan ng pag-download ng tapos na thesis mula sa XXX sa huli ng 2024.



### **Pahintulot sa Pakikilahok sa Pananaliksik ng Thesis**

Nabasa at naintindihan ko ang impormasyon tungkol sa pag-aaral sa itaas na teksto. Binigyan ako ng pagkakataon na magtanong at nasagot ko na ang mga ito. Maaari kong panatilihin ang nakasulat na impormasyon.

Sumasang-ayon ako na lumahok sa pananaliksik na inilarawan sa dokumentong ito, kabilang ang pagre-record.

Sumasang-ayon ako sa pagkuha at paglathala ng aking mga litrato.

Sumasang-ayon ako sa paggamit ng aking personal na impormasyon ayon sa inilarawan sa dokumentong ito.

.....  
Lugar at Petsa

.....  
Lagda at Pangalan

Kung mayroon kayong anumang katanungan, huwag mag-atubiling makipag-ugnayan sa akin:

Annika Burkhardt (an8061bu-s@student.lu.se)

Kung kailangang ninyo makipag-ugnayan sa aking supervisor: Mo Hamza, mo.hamza@risk.lth.se

## Annex 6: List of Interviewees in KIIs and FGDs

FGD / KII	Place	Date	Interviewees
FGD 1	Pangapisan North	14.02.2024	13 Community members
KII	Online	16.02.2024	CBDRM implementer
FGD 2	Malued	23.02.2024	6 Community members
KII	Pangasinan region	23.02.2024	Community leader
KII	Dagupan City	23.02.2024	Duty-bearer
KII	Dagupan City	23.02.2024	Duty-bearer
KII	Pangapisan North	24.02.2024	2 Duty-bearers
KII	Pangapisan North	24.02.2024	Duty-bearer
KII	Pangasinan region	24.02.2024	Community leader
KII	Urbiztondo City	27.02.2024	Duty-bearer
KII	Angatel	27.02.2024	2 Duty-bearers
KII	Office	01.03.2024	CBDRM implementer
KII	Office	01.03.2024	CBDRM implementer
KII	Office	01.03.2024	CBDRM implementer
KII	Office	01.03.2024	CBDRM implementer
KII	Office	01.03.2024	CBDRM implementer
KII	Office	05.03.2024	CBDRM implementer